

**Regional Network for
Equity in Health in east
and southern Africa**

DISCUSSION

Paper
NO. 108

Corporate responsibility for health in the extractive sector in East and Southern Africa



Rene Loewenson, Jens Hinricher,
Andreas Papamichail

Training and Research Support Centre

In the Regional Network for Equity in Health in east and
southern Africa (EQUINET)

EQUINET DISCUSSION PAPER 108

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Cite as: Loewenson R, Hinricher J, Papamichail A (2016) 'Corporate responsibility for health in the extractive sector in East and Southern Africa', EQUINET Discussion paper 108, Training and Research Support Centre, EQUINET: Harare.

Acknowledgement: We acknowledge the support from Marie Masotyia in the background searches and Dr Emmanuel Makasa and Rangarirai Machedze for external peer review. We acknowledge with gratitude support from Medico International, Germany.

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EXECUTIVE SUMMARY



Most East and Southern African (ESA) countries are richly endowed with mineral reserves. At the same time, the growth path achieved by extraction and export of unprocessed raw materials is rapid, but unsustainable. It does not often stimulate value-added processing activities in host countries and may generate environmental damage that impacts on health and well-being. African countries face a challenge to make and implement policy choices that link their natural resources to improved social and economic development, including to improved health. Protection against harm to health and fiscal contributions to healthcare go beyond corporate social responsibility (CSR) and are duties of private actors. While international and global guidance documents set out health obligations for extractive industries (EIs), these standards, including UN conventions, may be voluntary if they are not included in national laws, unless the national constitutions specifically provide otherwise. Given the spread of EIs across the ESA region, it would be important to ensure that corporate duties in relation to health are upheld across the region, including through regional guidance to harmonise laws.

This document produced by the Regional Network for Equity in Health in East and Southern Africa (EQUINET) through Training and Research Support Centre (TARSC) thus aims to inform policy dialogue to improve the legal frameworks for the duties and CSR of EIs in the ESA region. It presents evidence to support policy dialogue and health advocacy. It reviews the literature on EIs and health in ESA countries, explores key guidance principles/standards on health in EIs, and analyses from review of laws how far they are contained in domestic legislation of ESA countries. Using good practice in existing ESA laws and international guidance, the document proposes the content for regional guidance for policy and law in the region.

The literature review highlights that EIs are significant economic actors in the region, but create limited forward or backward linkages into the national economy and limited job creation outside the EIs, unless specifically stimulated. Their contribution to broader economic and social benefits is thus largely through their fiscal (tax) contribution. Their health benefits largely come from employment, income and some service provision for those directly employed and their families, and the fiscal contributions and measures encouraging local service linkages and local revenue sharing. EIs can also bring health risks: from accidents, hazardous working conditions; environmental hazards; poor environmental health infrastructure and social changes that increase risks of communicable and non-communicable diseases; and from the degradation of ecosystems and displacement of local people and local economic activities. These social costs are often inequitably distributed, especially when EIs play a limited role in poverty reduction or are given tax exemptions that reduce their contribution to social funding. EIs accept in principle and states advocate in policy that negative health and social impacts should be prevented. Some EIs invest in measures for this. While environmental audits appear to be more widely implemented, the literature suggests a gap between what should exist and what does exist. The literature identified various reasons for this. In the context of rapid changes in the sector, gaps may be in legal duties, resource and capacity constraints for state enforcement of laws, inadequate public information and exclusion from decision-making of affected communities.

The review found numerous international standards, codes or guidance documents on the practices of EIs and multinational enterprises, at UN multilateral level, from OECD countries, at African Union level, from financial institutions, and in CSR standards developed by international business and by civil society. Some regions, such as ECOWAS in West Africa, have moved towards a 'strength in numbers' approach, with efforts to harmonise laws at sub-regional level.

These international standards raise key areas relevant to health, detailed in the paper, relating to:

- Consultation and protection of health in negotiation of prospecting rights/licenses;
- Health and social protection in resettlement/relocation of affected communities;
- General governance issues;
- Occupational health and safety (OHS) for employed workers/sub-contractors;
- Health benefits for workers and families;
- Environment, health and social protection for surrounding communities; and
- EI fiscal contributions towards health and health services.

The paper analyses the relevant laws from across ESA countries. It finds that the laws generally cover occupational health and safety for workers and environmental protection relatively well, with more recent environment laws including more comprehensive provisions for information, disclosure, consultation, environmental audits and liability to remedy damages than the older public health laws did. However, in some areas the legal protections are more limited or absent: in ensuring specific health protection or services for surrounding communities, including for resettled communities or post-mine closure. Environmental impact assessments before awarding of licenses are well covered in law, but few explicitly integrate health and social impact assessments, or plans for mitigating these wider impacts. Not all ESA countries make specific provisions for inclusion of community representatives in these areas.

While ESA laws generally make specific reference to using fiscal contributions and to tax or royalty exemptions for stimulating local employment, training and skills transfer and use of local goods and services, there is limited reference to their contributions for health and social welfare, which are generally identified as areas of voluntary CSR. The literature notes that Democratic Republic of the Congo (DRC) introduced a micro-levy on EIs in September 2014 to fight chronic malnutrition, and in the same year Zimbabwe lifted the exemption on the sector from contribution to the AIDS Levy Fund. However, no other reference to insurance or other earmarked contributions for health were found. Some ESA countries explicitly stipulate the share of fiscal revenues from EIs to be used for local development, and only one country provides a specific duty on EIs to contribute to health services in their area. Kenya provides for EI contribution to a pooled fund for financial security against risk or harm, but only for the environment.

While there were gaps, there were also many legal provisions that do provide potential for health rights and protections to be advanced in EIs, albeit scattered across countries. Some laws were very comprehensive on specific areas. While the literature suggested that countries with older EI sectors may have more developed laws, some of the more comprehensive provisions come from laws passed in countries with more recent EI activities, such as Mozambique and Tanzania, where new legal developments have been integrated, including in transparency on resource use. While not a focus of this paper, the findings suggest a need to explore further and act on the factors affecting public awareness and the implementation and oversight of *existing* law on health and social protections in EIs.

As is being implemented in other regions of Africa, there is scope for regional guidance and harmonisation of laws relating to EIs, including in relation to health. The Southern African Development Community (SADC) already has a Protocol on Mining 1997 and an intention to harmonise mining policies, standards and laws in southern Africa, including in terms of health, safety and environment. While no single law in ESA countries addresses all aspects of international guidance on protection and health and social welfare in EIs, in combination the laws in ESA countries provide clauses that could form the basis of such regional guidance. Drawing guidance from laws from *within* the region suggests their feasibility for all countries.

Drawing from different ESA laws legal guidance is proposed for health and social protection shown overleaf, covering:

1. Award of prospecting rights/licenses and EI agreements;
2. Resettlement of affected communities due to mining activities;
3. OHS for employed workers and contractors in the mining sector;
4. Health benefits for workers, families and surrounding communities;
5. Environment, health and social protection for surrounding communities;
6. Fiscal contributions towards health and health services;
7. Stimulation of forward and backward links with local sectors and services supporting health;
8. Post-mine closure obligations for public health; and for
9. Governance of these issues, including for good corporate governance practices, public transparency and accountability, constructive dialogue, reporting and oversight, to foster a relationship of confidence and mutual trust between EIs and the societies in which they operate.



Recommendations for regional guidance on legal health and social protection in East and Southern Africa

(See pages 37-40 for the specific ESA country laws the clauses in the recommended guidance derives from)

Given the existing intention to harmonise legal standards on extractive industries (EIs) in Africa, the following is proposed for regional guidance to harmonise laws on health and social protection in EIs, drawing on clauses from existing laws from *within* the ESA region and reflecting key areas of health protection provided for in international guidance.

1. **Protection of health related issues in negotiation of prospecting rights / licenses and EI agreements implies legal provision of:**
 - Approval of a mining right subject to ensuring that mining activity prevents any adverse harm to human health. Mining rights holders duty to promote public health and security in accordance with national and international applicable legislation.
 - Implementation and approval by relevant government departments, including environment and health departments, of environmental, social and health impact assessments (ESHIA) that consider: environment, social and health impact of the specific EI project as a pre-condition for granting and obtaining mining rights.
 - ESHIAs submitted for approval of mining rights applications to include costed impact prevention/mitigation; post mining rehabilitation plans; evidence of ability to comply with health and safety law; socially responsible investments for the local community; benefit to and measures for engaging local communities; resettlement plans (where relevant); monitoring and audits and grievance and dispute settlement mechanisms.
 - Local authorities and local communities to be informed about the ESHIAs and consulted on the impacts and any measures to be taken that may affect them, or the area in which they live, before EI approval, with ESHIAs reporting on these consultations and their recommendations.
 - The state to implement wider ESHIAs that plan for the cumulative impacts of EI projects across a wider area and to set periods for updated ESHIAs for licensing renewal.
2. **Health and social protection relating to resettlement or relocation of affected communities due to mining activities calls for legal provision of:**
 - Government duty to protect communities in areas of mining.
 - No forced eviction and avoidance of displacement of inhabitants.
 - When avoidance of displacement is not possible, displacement minimised by exploring alternative project designs and a duty for companies to pay the affected communities a fair and transparent compensation fixed in a memorandum between the Government, the company and the community as a requirement for the allocation of mining exploration rights, with resettlement plans included in the EHSIA as above.
 - Fair compensation to cover: resettlement in dignified homes and in better conditions than previous; preservation of historical, cultural and symbolic heritage of families and communities; socio-economic activities to re-establish or improve their living standards and incomes and social infrastructures for health, learning, sport in ways to be agreed.
 - EI duty to ensure informed participation of, constructive dialogue with and fair management of grievances from local communities at all stages in a resettlement process.

3. **OHS protections for employed workers and contractors in the mining sector**, to include:
 - The promotion and protection of occupational health and safety for workers and contractors; EI duties of training in workplace health and safety; prevention and reporting of accidents and injury; provision of periodic medical examinations, with no exemption from these duties for those holding mineral rights.
 - Legal objects to give effect to public international law obligations for OHS on mines.
 - EI duty to make available to workers representatives, competent authorities, workers' and employers' organizations and upon request information on the safety and health standards relevant to their local operations, those observed in other countries, and relevant special hazards and protective measures.
 - Powers of state inspectors, including to suspend mining activity in the event of serious risk to life and health of workers and the population.
 - Provision for workers compensation for work related injury or disease, and a presumption that an occupational disease was due to employment unless proved otherwise.
 - Provision for workers to rescind an employment contract that exposes them to serious and unforeseen health and safety risks.
4. **Health benefits for workers, families and surrounding communities** to include:
 - EI duties to environments for health (see next section) and access to medical care.
 - EI owners to avoid harm to health, to prevent nuisances that would be 'injurious or dangerous to health'; to report and prevent the spread of infectious and notifiable diseases; to avoid or minimize the risks and impacts to community health, safety, and security that may arise from project related-activities, with particular attention to vulnerable groups .
 - Mining to be done in a way that promotes socio-economic development, including of the local community in the surrounding area based on prioritisation of community needs, health and safety.
 - Prohibition of employment of children and young persons in mining and quarrying.
 - Safe and healthy working conditions for migrant workers, workers engaged by third parties, and workers in the client's supply chain.
 - EIs to make fiscal (and insurance) contributions to ensure access to health services for workers and their families.
5. **Environment, health and social protection for surrounding communities** to include:
 - Citizens' right to live in a healthy environment and benefit from rational use of natural resources. Activities with immediate or long term effects on the environment to be analysed in advance, to eliminate or minimize negative effects and to support environmental conservation and protection and rational use of natural resources.
 - EI duties to implement ESHIAs (see above)
 - Mining zones and operations to not disturb the integrated social and economic development of regions and populations, with state power to suspend mining operations that cause serious risk to life and health of populations and harm to the environment.
 - Any person to apply for legal remedy to stop any act that violates the right to a clean and healthy environment, whether they are directly affected or not. Freedom for any person to request information relating to the environment that is relevant to its conservation.
 - All persons or organisations whose actions cause harm to the environment, or the degradation, destruction or depletion of national resources to be held liable for the same and be required to repair such damage and/or pay compensation for damage caused.
 - Redress from those who cause damage to the environment and to human and animal health. Contribution from mine license holders to an environmental protection bond, fund or other forms of financial security for any environmental damage.
 - Relinquishing a mining right to not relieve the holder from meeting their environmental and community obligations.

6. **Fiscal contributions towards health and health services** includes:
 - Communities and local authorities in mine areas to benefit directly from a share of EI fiscal contributions, with at least 10% to local communities.
 - EIs to refrain from seeking or accepting exemptions not contemplated in the regulatory framework related to environmental, health, safety, labour, taxation, financial incentives, or other issues.
 - State authorities to apply levies to EI activities that impact on environment, health and social welfare or to contribute towards national funds for public health.
 - EIs to submit annual reports and information on local content, corporate social responsibility and capital expenditures.
7. **Stimulation of forward and backward links with local sectors and services supporting health**, including:
 - Provisions for employment of local citizens; use of local goods and services; training programmes and skills transfer.
 - EI contribution to economic, social and environmental progress and socially responsible investment for the local communities, within community development agreements and share ownership arrangements, particularly for historically disadvantaged people.
8. **Post-mine closure obligations**, including
 - EI duty to provide post closure plans in ESHIAs before mining rights approval.
 - Continuing EI duties post closure for fiscal, environment and other legal obligations, including in relation to screening, care services and compensation for chronic occupational diseases.
 - Ensuring environmental reclamation, public health and safety of the area, with measures for handover of welfare services and social infrastructures or other social or health aspects, in consultation with local authorities and affected communities.
9. In relation to **governance** of these issues, inclusion in law of:
 - Respect for rights to information, association, assembly and participation.
 - EI support and upholding of good corporate governance principles and development and application of good corporate governance practices that foster a relationship of confidence and mutual trust between enterprises and the societies in which they operate.
 - EI compliance with legal provisions for registration and reporting, joint consultation and co-determination between workers and managers on workplace safety and employment, disclosure and public information and consultation on ESHIAs.
 - EI owner duty to ensure the informed participation of the affected local communities and to remain in constructive dialogue with them, with community consultation *prior* to the granting of licenses/rights and a duty on government to create mechanisms and community capabilities for such engagement.
 - Provisions for transparency and accountability, for an independent oversight committee that includes civil society, with reporting and disclosure obligations on EIs and measures for public accountability, public reporting and citizen awareness, including of all past and current mineral development agreements.
 - Prohibition of public officers acquiring mining rights or interests to protect against conflict of interest in decision making.

1. BACKGROUND

East and Southern African (ESA) countries have significant genetic, biodiversity, mineral and other natural resources (World Bank, 2011). The resources exist within the continent to satisfy the basic social determinants of health. However, the human development index (HDI), a measure of life expectancy, adult literacy and gross domestic product (GDP) per capita, improved in only five of the sixteen ESA countries between 1997 and 2005, despite growing economies in most of these countries (EQUINET, 2012). Those ESA countries with higher levels of aggregate wealth also had higher levels of inequality in wealth, suggesting that growth paths are not addressing and may be intensifying inequality (EQUINET, 2012). This has raised a policy demand for more inclusive economic growth (AU Commission, 2015).

Most ESA countries are richly endowed with mineral reserves, collectively including diamonds, gold, uranium, aluminium, copper, platinum and coal, providing an important source of export earnings and (foreign) investment (Yager et al., 2012). In 2009, Africa's oil, gas and minerals exports were worth roughly five times the value of international aid to the continent (\$246 billion vs. \$49 billion). Global capital markets and production trends have made African land and natural resources (oil, minerals) sought after by high- and middle-income countries, including emergent economies of China, Brazil and India. Extractive industries (EIs) refer to processes that involve the extraction of raw materials from the earth to be used by consumers, i.e. any operations that remove metals, mineral and aggregates from the earth. African countries are thus increasingly engaging in global markets. At the same time, the rewards are skewed towards those countries and individuals that have existing economic power (Birdsall, 2005). African countries that are rich in these natural resources have experienced high levels of inequality and poverty – often referred to as ‘the resource curse’ (Global Witness, 2012). The growth path achieved by extraction and export of unprocessed raw materials is rapid, but unsustainable. It does not often stimulate value-added processing activities in African countries, risking lower growth and well-being in the future. For example, despite a rising share of natural capital in the Mozambique economy, the share of *produced* capital in total wealth remained one of the lowest in the region in the 2000s (WB, 2014).

Given their position in providing resources for an increasingly unequal - and post-2008 crisis- ridden global economy - African countries face a challenge to make and implement policy choices that link their natural resources to improved social and economic development. The health sector is one contributor to this. It does so in its public health role of ensuring that production does not generate harm to health. It also supports poverty reduction and social development by leveraging fiscal and other resources from economic activities to promote health and support health services. Recognising this, African countries have negotiated for the protection of public health in trade agreements, such as in the Trade-related Aspects of Intellectual Property Rights (TRIPS) Agreement of the World Trade Organisation (WTO) and other bilateral or international level agreements (Fontana, 2011). This raises the question of how far extractive projects in the region have integrated such returns to social development.

Corporate social responsibility (CSR) is a well-established concept, whether in relation to environmental, economic or social development. CSR has been applied to:

- i. Provide occupational benefits (health, maternity, pension, disability, funeral) for local employees, including their use of public services;
- ii. Provide access to company health facilities for communities living around large projects;
- iii. Invest in public services, public health and action on social determinants of health (SDH) for communities surrounding large projects (including schools, healthcare, infrastructure);
- iv. Support links between large projects and small-scale producers, such as to supply local foods for consumption on mines.

However, protection against harm to health and fiscal contributions to healthcare go beyond CSR and are, rather, *duties* of private actors.

Such legal duties include, for example:

- i. Preventing and managing occupational health and safety (OHS) risks in line with International Labour Organisation Conventions (ILO), including through joint management and worker mechanisms for co-determination, occupational health inspection, training, surveillance services and management of injury;
- ii. Contributing to state inspection of occupational and environmental hazards and emissions and enforcement of legal standards, and implementing health impact assessments (HIAs) and environmental impact assessments (EIAs);
- iii. Ensuring that standards and measures cover all exposed communities, including those living on mines and those involved in related transport and infrastructure work;
- iv. Preventing and managing public health risks associated with EIs, from environmental hazards or alcohol consumption, sexually transmitted and other diseases;
- v. Ensuring that any resettlement of populations due to EIs is co-determined with participation of those affected, with schools, clinics of adequate standard, housing, water, sanitation, communication and transport infrastructures built and staffed *before* communities are resettled; and
- vi. Making fiscal contributions and tax structures that ensure contribution from EIs to support health and related public services (Andarko, 2013; Broad 2014; ILO 2014; Murombo 2013).

While many countries in Europe and North America have laws setting duties for CSR, many ESA countries do not. Regulation and enforcement of health and social obligations varies in the region. Mining or oil codes specify procedures and parameters for granting concessions and other rights of access, general conditions for exploitation, royalties, taxes and other incentives specific to the EIs. However, tax structures and laws are reported to be weaker in specifying EIO's health and social obligations, and parliaments are reported to face capacity, political and other constraints in fulfilling their oversight role in this area (NDIIA, 2007). International and global guidance documents from United Nations (UN) agencies and OECD (OECD, 2009) set out health obligations for EIs. However, these standards, including UN conventions, may be voluntary if they are not included in national laws, unless the national constitutions specifically provide otherwise. There is also variation in the extent to which health and social impacts are included within new measures such as environmental impact assessments, while ESA states have variable capacities to implement these measures.

Given the spread of EIs across the ESA region, deficits in legal and fiscal frameworks, measures and capacities should be addressed to ensure that corporate duties in relation to health are upheld across all countries in the region. The regional economic communities - SADC and East African Community (EAC) – can support this by providing guidance for and harmonisation of these legal frameworks, drawing on international standards and on laws that already exist within some countries in the region.

Goals: This document thus aims to inform policy dialogue to improve the legal and policy frameworks for legal duties and CSR of EIs in the ESA region. It presents evidence to support policy dialogue, negotiations, health advocacy and legal development in ESA countries. It presents evidence from literature review and legal analysis on:

- a. The type and economic contribution of mining/extractive activities in the ESA region; their documented social and health impacts of and responses to EI activities in ESA countries;
- b. The international guidance principles/standards on key areas affecting health in EIs and the extent to which they are contained in domestic legislation and regulation of extractive industries in ESA countries;
- c. The extent to which EIs are explicitly exempt from these duties and general health, health service duties set in law; and
- d. Documented constraints in and proposals for improvement of EI duties and CSR in ESA countries.

On the basis of good practice in existing laws and international guidance, the document proposes the content for regional guidance for policy and law in the ESA region, and raises issues on their implementation.

2. METHODS

The work involved a literature review, analysis of international guidance documents, collection and analysis of relevant laws from ESA countries and overall analysis of the findings.

For the literature review, a keyword search was implemented of English language documents published between January 2000 and August 2015. (These date limits applied only to the literature review, and the sourcing and review of laws did not apply these limits and included relevant current laws whatever their date of enactment). The literature review searches were in Google Scholar and PubMed of documents that had in their titles the key words *extractive industry/ies* or *mining* and *health* or *social* and *Africa* or one of the 16 African countries covered by the work (viz Angola, Botswana, Democratic Republic of Congo (DRC), Kenya, Lesotho, Madagascar, Malawi, Mauritius, Mozambique, Namibia, South Africa, Swaziland, Tanzania, Uganda, Zambia, Zimbabwe). The first author reviewed the 117 documents sourced and 53 that were relevant to the work, included with a further 14 added from snowballing. A further separate search was implemented of the same libraries for 2000 to 2015 to identify the health impacts of the key mining activities implemented in the region. This covered coal, gold, diamonds, uranium, copper, cobalt and oil mining and hydroelectric power generation. A total of 19 papers were used for this. Finally, online UN and World Bank databases were used to search relevant economic information for the countries.

There are limitations in these methods for the literature review. The search did not include literature in French or Portuguese and so may have missed some materials relevant to Angola, Mozambique and Democratic Republic of Congo (DRC). Recent information and some forms of evidence on EIs and their social effects are not published in online documents, and may be held in grey literature or not documented at all. However, we consider the searches to have generated adequate evidence to identify key areas for the legal analysis.

The literature review was used to develop a framework of the broad areas of law covered in the analysis of international and national laws, shown in *Appendix 1*. It included:

- i. Consultation and protection of health in negotiation of prospecting rights/licenses;
- ii. Health and social protections in resettlement/relocation of affected communities;
- iii. Occupational health and safety (OHS) for employed workers/contractors;
- iv. Health benefits for workers, families and surrounding communities;
- v. Environment, health and social protection for surrounding communities;
- vi. Fiscal contributions towards health and health services specifically in relation to EIs;
- vii. Forward and backward links with local sectors and services supporting health;
- viii. Use of wealth funds, community ownership for local well-being;
- ix. Post-mine closure obligations; and
- x. General governance issues.

These key areas were then applied in a separate search of international documents relevant to these fields, drawing on those identified from the literature review, from a separate search using the same keywords with *international standards* OR *agreements* and from snowballing. Twenty-five documents were obtained that either set standards or provide guidance in the areas relevant to the framework for the extractive industries at international level, whether by multilateral institutions or by the business sector, including for African regional or continental institutions. These are included in the references. As these documents are highly likely to be in the public domain and online, we consider the search findings to be relatively complete.

The documents found in the international review were analysed to identify key international standards within the ten broad areas of law in the framework. Key national laws relating to EIs and their health obligations were sourced from fifteen ESA countries. Mauritius was not included as it does not have a mining/EI sector. The laws were searched in 2016 in online law and parliament libraries in ESA countries, from academic, national and international online law databases, and from legal search engines and sector-related websites.

The full set of laws sourced is shown in *Appendix 2*. They cover/draw from:

- The national constitution
- Mines- and minerals-related laws
- Public health law and occupational health and safety law
- Environment-related laws
- Labour relations/employment law
- Budget, tax and investment laws; laws relating to indigenisation or community ownership that specifically relate to EIs and their health and health service obligations.

There were some gaps in accessing laws, particularly those from smaller countries without online databases or where key content is contained in subsidiary regulations. While a number of laws from Angola, DRC, Madagascar and Mozambique were accessed in English, some were only available in French or Portuguese, in some cases limiting inclusion as the project resources did not provide for translation. Some change is underway in EI-related laws, so some newer laws may have been passed since the searches. Notwithstanding this, given the number of laws included and the intention to use the review to point to trends and areas for regional guidance, we suggest that the analysis is robust. The national laws were reviewed and analysed against the identified international standards for their coverage of these areas.

This report thus presents in sequential sections the state of EIs and their CSR and duties on health in the ESA region, the international guidance for these roles and the extent to which these roles and duties are covered in national laws. In the final section we propose content for regional guidance for policy and law for EI protection of health in the ESA region.

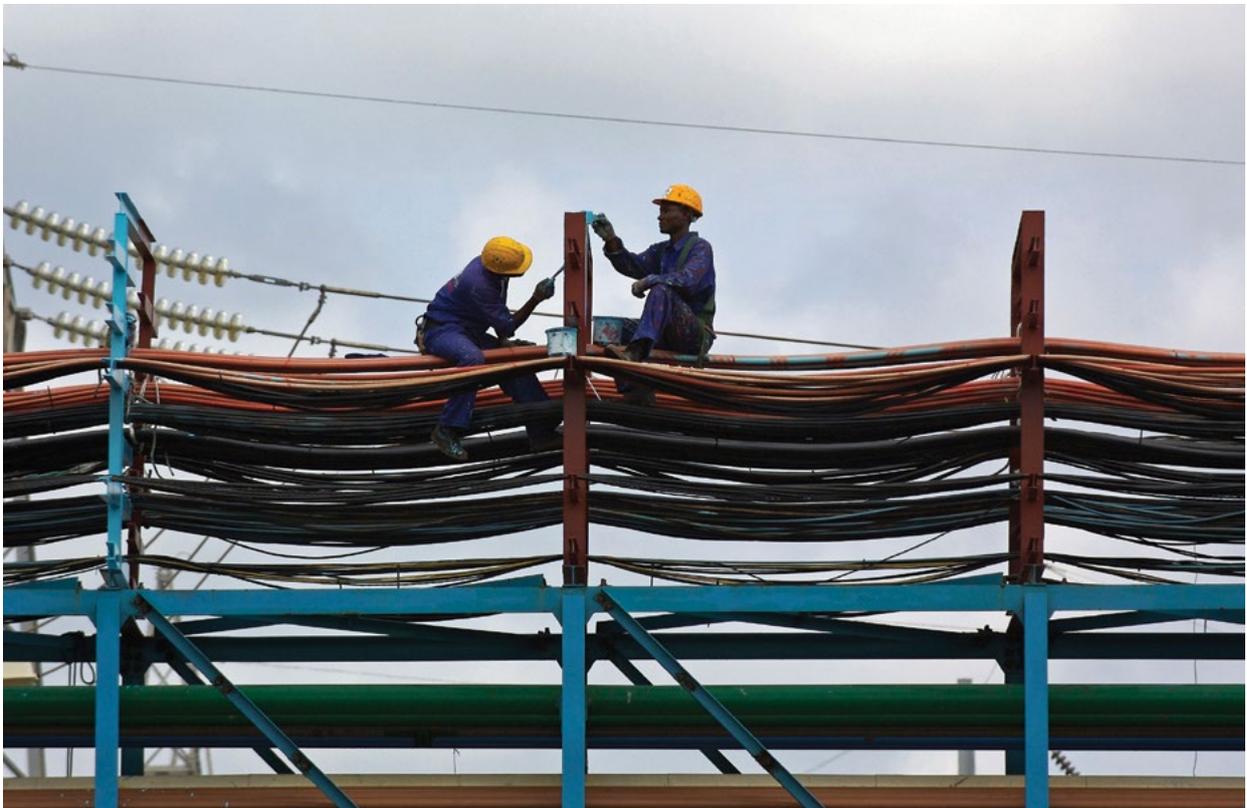


Photo: Used under creative commons license, Jonathan Ernst/World Bank 2006

3. MINING AND EXTRACTIVE ACTIVITIES IN THE ESA REGION

3.1 Extractive Industry economic activities

EIs include oil and gas extraction, mining, dredging and quarrying. Minerals have been key contributors to African economies, and Africa commands a large share of strategic minerals globally, with many ESA countries key producers of this output (see *Table 1*).

Table 1: African shares of strategic mineral production, excluding oil, 2010

Strategic mineral	African share of world production (%)	Key ESA country shares of African production
Cobalt	70	DR Congo 86%; Zambia 8%
Diamonds	57	Botswana 29%; DR Congo 23%; Angola 18%; South Africa 12%; Zimbabwe 12%
Gold	19	South Africa 39%; Tanzania, 8%
Uranium	19	Namibia 46%; South Africa <10%
Aluminium	4	South Africa 44%; Mozambique 30%
Copper	9	Zambia 56%; South Africa 30%; DR Congo 7%
Platinum	-	South Africa 92%
Coal	4	South Africa 98%, Zimbabwe 1%

NB: this does not include significant new reserves post-2010, such as of coal in Mozambique.

Source: Yager et al., 2012

The key mining activities in ESA countries are shown in *Table 2*, with evidence on their share of contribution to GDP for those countries where the information is available. As of 2011, the countries with highest levels of EIs in mining (in relation to mineral rents as a share of GDP) were DRC, South Africa, Tanzania, Zambia and Zimbabwe, with Angola also having a high EI share of GDP. However, indications are that new activities are growing post-2000 in other countries, including Mozambique (coal and oil), Malawi (uranium and oil) and Uganda (oil and gas).

There is report of many new sites of extractives exploration and development due to the surge in demand for base metals and the increasing investment in this area from emerging economies (Besada and Martin, 2013; De Backer, 2012; Kabemba and Nhancale, 2012). Emergent economies such as China have concluded agreements that exchange their investment in infrastructure for mining rights - in Angola for oil, in Mozambique for coal, in DRC for copper and cobalt, in South Africa for chromium and in Zambia for copper (Besada and Martin, 2013; Shelton and Kabemba, 2012). These new investors add to those from Europe and North America, particularly in countries with longer-term EI operations. In 2009, Canadian companies made up more than 60% of new mining investors in mining exploration across Africa (Lambrechts et al., 2009). While mapping the specific domestic and multinational EIs in each ESA country was beyond the scope of this work, evidence suggests that EI ownership is highly concentrated. In South Africa, five companies were reported to account for 85% of total mining ownership: Ingwe Collieries (a subsidiary of BHP Billiton), Anglo Coal and and Kumba Resources (Anglo-American owned), Sasol and Eyesizwe (South African) (Global Health Watch, 2014; Munnik, 2010).

EIs are significant economic actors. They contributed to economic booms in 2002 to 2008, but with declines following commodity price falls after 2009 (AU, 2009). There is some indication that their economic benefit may be limited to specific forms of return. While there is a potential for skills transfer generally, EIs are commonly 'enclave' activities, using largely imported equipment, technical, financial and managerial services and with refinement and processing taking place outside ESA countries. They thus create limited forward or backward linkages into the national economy and limited job creation outside the EIs, unless specifically stimulated. Von der Goltz and Barnwal (2012) found from demographic and health data from 44 African, Latin American, Eastern European and Asian countries between 1986 to 2012 that households living in towns within 5km of mines had

higher *aggregate* scores on an asset index than communities living 5-20km away. There was, however, high inequality in the asset *index* within these communities closer to mines, suggesting that any benefits may be focused on particular subgroups.

Table 2: Mining activities in ESA countries

Country	Key mining/extractive activities	Mineral rents as % GDP	EI contribution to GDP (and year)
Angola	Diamonds, iron ore, oil	Na	59.4% of GDP (2008)
Botswana	Diamonds, coal, copper, nickel, gold	2.19	
DRC	Diamonds, copper, cobalt, coltan, gold, oil, silver	17.03	50.3% exports (2000-2003)
Kenya	Gold	0.20	
Lesotho	Diamonds	0.0	
Madagascar	Gold	1.79	
Malawi	Uranium	0.0	3% of GDP. Expected to rise due to uranium (2009)
Mauritius	Nil	0.0	
Mozambique	Aluminium, coal	0.12	
Namibia	Diamonds	1.45	
South Africa	Coal, chromium, diamonds, gold, platinum	3.69	18% of GDP (2014)
Swaziland	Na	Na	
Tanzania	Gold	3.70	2.3% of GDP (2010)
Uganda	Iron ore	0.20	
Zambia	Copper	16.49	10% of GDP (2006) 67% total government revenue (2005)
Zimbabwe	Diamonds, platinum	5.43	

NB: Mineral rents are the difference between the value of production for a stock of minerals at world prices and their total costs of production. Minerals included in the calculation are tin, gold, lead, zinc, iron, copper, nickel, silver, bauxite, and phosphate. Na = not available.

Sources: Bamat, et al., 2011; Bryan and Hofmann 2007; De Backer 2012; Global Health Watch 2014; Human Rights Watch 2011; Kabemba and Nhancale 2012; Lange and Kolstad 2012; Lungu 2008; Manirakiza 2012; Phiri 2010; Twesigye 2010; Wilson 2012; World Bank 2011; ZELA 2011.

EI contributions to broader economic benefit may thus largely be through their fiscal (tax) contribution (Lambrechts et al., 2009). In Tanzania, Zambia, Malawi and the DRC the fiscal contribution from EIs was from royalties on the production value and payroll taxes. In South Africa a larger share of revenue came from corporate income tax, although government planned a review of royalties. Zambia imposes taxes on windfalls and variable profits. However, all the above countries also gave significant tax concessions, including exemptions on value added tax on imports or export sales; no customs duties on imports or exports; lower corporate income tax (CIT) rates; lower withholding tax rates and reductions on taxes on profits and on royalties (Lambrechts et al., 2009). Kabemba and Nhancale (2012) report that not all the revenues paid for mining rights are captured in the public domain.

3.2 Social and health impacts of EI activities in ESA countries

EIs present a number of benefits and risks to health: The benefits largely come from the employment and income security and the employee benefits they bring for those directly employed and from the social services some EIs provide to employees and their families. As benefits, the literature reports job creation and improved wage levels in Zambia, local capacity building and training in Zimbabwe, acceptance of union pressures for adherence to standards and good health and safety performance in South Africa, and investment in community development in all three countries (Shelton and Kabemba, 2012). There may be some wider spill-over benefit in the local economy from the improved purchasing power of those employed, and some wider gain from infrastructures developed by EIs, if these are made accessible to communities.

EIs also bring health risks: Beyond a high rate of accidents and risk to workers from hazardous working conditions, the environmental hazards affect health in the wider community, as do risks from poor infrastructure for housing, water supply and sanitation. The literature reports the spread of communicable diseases (such as TB) and cholera epidemics from poor environmental health infrastructure, sexually transmitted diseases, and HIV in communities surrounding the mines. EIs have been associated with a loss of biodiversity and degradation of ecosystems, with air pollution (e.g., dust, sulphur dioxide, lead, arsenic and other smelter gas substances) and with water pollution, release of chemicals and heavy metals in rivers. Mines and mineral processing can require extensive land and water resources, displacing local people, and pipelines can cross land affecting local economic activities (CRS, 2011). There have also been reports of relocation of populations due to land areas being taken over by EIs and transport routes for EI products bringing risks of HIV, TB and other communicable diseases (University of Roma TRE, 2007; Wingqvist, 2011; Aaboe and Kring, 2013). The specific risks and benefits are shown in *Table 3*.

Table 3: Benefits, risks to health in selected production activities

Area	Potential benefits, beneficiaries	Potential risks and vulnerable groups
Coal mining	Increased formal employment, secure incomes and an organised workforce provide entry points for health and nutrition promotion, healthy living conditions and health screening and care services. The beneficiaries are higher income, skilled workers (not all local), their families and enterprises linking with mines.	Inhaled air pollutants (CO ₂ , nitrogen, sulphur oxides, hydrocarbons) cause eyes, nose and throat irritation and can lead to lung (black lung, silicosis, complicating TB) and skin diseases. Radionuclides can lead to respiratory disease, lung cancer and gastrointestinal problems. Burns, falls, injury, transport accidents lead to disability and loss of income. Communities living near mines are exposed to carbon, nitrogen gas emissions, mercury, cadmium, copper, nickel, ammonia and fluoride and water, soil and air pollution from waste and fly ash spills. Income differentials and insecure employment can increase alcohol consumption, commercial sex work and sexually transmitted infections (STIs) in mine communities. Increased population pressure on infrastructure and services. Forced resettlement of communities in mining areas and loss of arable land and pastures. Abandoned mines can lead to risk of sinkholes and heavy metal contamination.
Gold mining	Job creation, increased income, skills transfer on mining methods, environment management, health and safety, business planning and management yield direct benefits. Improved local purchasing power can raise demand for locally produced goods and services and raise opportunities for local economic diversification and for small producers. Engaging small-scale miners in planning large mine closures may lead to innovative approaches with benefits to local enterprises, small-scale miners, families and local community	Exposure to asbestos, silica dust and arsenic lead to risk of lung disease and lung, liver, and oesophageal cancer. Mercury contamination of water, soil, and food raise risk of lung diseases, gastrointestinal, neurological, and renal effects, and reproductive risks in female workers. Mines can affect environments (contaminated water resources, stressed water tables, unlined mine tailings, dams and tailings) creating health risks. Sanitation and public healthcare deficiencies raise risk of communicable diseases, while silicosis can elevate the risk of TB. Income differentials and remote location can increase alcohol consumption, crime, commercial sex work and STIs in mine communities, raise pressure on infrastructure and services and increase illegal trading, smuggling and money laundering. When combined with weak planning, hiring of migrant workers can affect cohesion, lead to tensions, stress and violence, with migrant workers particularly vulnerable.
Diamond mining	Employment and income benefits as above for formal workers and selected benefits as above for their families.	Unstable communities and increased population pressure on infrastructure and services. Increases in illegal trading, money laundering, criminal activity and violence.

Table 3: Benefits, risks to health in selected production activities, continued.

Area	Potential benefits, beneficiaries	Potential risks and vulnerable groups
Diamond mining (cont)	Opportunities for fair trade operations that benefit small producers, communities and buyers, through increased local purchasing power.	Weak/no local consultation and benefits to local communities and inadequate planning associated with increased conflict between local community and large mines. Occupational injury. Forced relocation suppresses agriculture and other employment opportunities and can lead to communities going to areas with poorer services.
Uranium mining	Employment and income benefits as above for formal workers and selected benefits as above for their families.	Exposure of miners to fine particles of uranium and to radon gas leading to risk of bronchial and lung cancer, leukaemia, stomach cancer and silicosis. Uranium exposure can lead to chromosome mutations, birth defects. Radioactive contamination of groundwater and heavy metals; use of waste rocks from mines to improve roads and radioactive metal reuse by locals to make utensils and other goods raises risk of birth defects, cancer and immune impairment. Water extraction can reduce the ground-water table. Toxic risks from pumping contaminated water back into rivers and arsenic in tailing ponds of abandoned mines.
Copper mining	Employment and income benefits as above for formal workers and selected benefits as above for their families. Improvements to the local economy depending on planning and inclusion of local community. Decreased sexual risk-taking noted in 2000s in copper mining communities in Zambia.	Occupational injuries and fatalities, noise pollution and physical injury as for all heavy metal mining. Long-term exposure to copper dust causes respiratory irritation, headaches, dizziness, nausea and diarrhoea. Water with high levels of copper may cause nausea, vomiting, stomach cramps or diarrhoea. Isolated mine settings contribute to alcoholism, commercial sex work and STIs. Poor working conditions, long working hours and poor OHS raise stress, especially if workers/unions face threat for exposing risks or injury or for refusal of unsafe work.
Cobalt mining	Employment and income benefits as above for formal workers and selected benefits as above for their families.	Asthma, pneumonia, metal lung disease due to chronic exposure to dust or fumes. Dermal exposure resulting in contact dermatitis. Risks similar to other heavy metal mining including noise pollution, physical injury, harmful alcohol consumption, commercial sex work and STIs. Eviction of communities around mining sites raises risks noted for other types of mining.
Oil and gas extraction	Revenue generation can improve local purchasing power with spill-over impacts for communities. Employment and income benefits as above for formal workers and selected benefits as above for their families.	Pollution and environmental destruction from oil spills, waste dumping and gas flaring damage soil fertility and agricultural productivity for decades. Forced evictions of communities in oil-rich areas and inadequate development planning can lead to population pressures, overstretched services and violence due to competition over resources, increasing risk of disease. Threats to food security due to shift away from agriculture.
Energy (hydro-power)	Employment, income benefits for workers, benefits for their families as above. Access to clean energy hydropower reduces exposure to wood-fuels, paraffin for those that access it.	Asbestos, dust, chemical (lubricants and insulation products) and mechanical risks. Electrical hazards and risks from equipment contaminated with polychlorinated biphenyls in workers and communities living in the area of power projects. Environmental changes increase risks of natural disasters (flooding), reduced water supply and harm fish downstream.

Sources: Epstein et al., 2011; ICCM, 2010; Chadderton et al., 2011; Aaboe and Kring 2013; HRW 2013; van der Goltz and Barnwal 2014; Coughlin et al., 2013; Basu et al., 2015; Hentschel et al., 2003; Mrema et al., 2015; Mdee 2015; Eisler 2010; IPPNW 2010; Mkandawire and Dudel 2005; ATSDR 2004a; b; AI 2013; CDC 2013; Greenpeace 2010; Global Health Watch 2014; Wilson 2012; Clarke 2010; Kabemba and Nhancale 2012; Munnik 2010; Murombo 2013; Bambas-Nolen et al., 2013; Wilson 2012.

The social costs of resource exploitation highlighted in *Table 3* are often inequitably distributed. The health impacts noted in the table affect workers in the mines and their immediate families, the communities that are moved as a result of mining, the mobile or migrant communities and workers in activities associated with EIs (such as transport of products) and the communities living around the mines. The health risks arise in part from the activities in the mines, but also from their impact on population movements and interactions and on environments. In Zambia, Zimbabwe and South Africa, Shelton and Kabemba (2012) reported poor working and safety conditions in some mines, including low pay levels and job insecurity, underage employment and working days exceeding the legal limit of 8 hours per day. Mega-projects and extractive industries have limited impact on poverty reduction. In part this is due to their capital intensity, limiting the jobs they create, and in part due to highly favourable tax regimes limiting their fiscal contributions.

Poor communities living around the mines are particularly vulnerable to pollutants, given their poor living conditions. They are also least able to obtain reliable information on these risks, or to register their concerns with decision-makers (CRS, 2011). One study of communities adjacent to 800 mines across 44 low- and middle-income countries, including countries in ESA, found that lead and heavy metals that may be present near mines (within 5km) led to depressed blood haemoglobin in women, with a 3-10% increase in the incidence of anaemia compared to control groups in areas not close to mines. They found that these women recovered more slowly from blood loss during pregnancy and delivery and that their children had stunted growth due to in utero exposure to lead and heavy metals (von der Goltz and Barnwal, 2012).

One group that has been directly affected, but without the benefit of improved incomes, is the community displaced by mines. San communities were reported to have been forcibly removed in Botswana to pave way for mining by Gem Diamonds in the Central Kalahari Game Reserve, and in Marange, Zimbabwe, communities were removed to facilitate diamond-mining activities (GEF, OSISA and UNDP, 2013). In Tete Province, Mozambique, by 2013 approximately 2,500 families had been or were in the process of being resettled to facilitate coal mining (HRW, 2013). In the early years, poor planning was reported to have led to loss of livelihoods, access to water, flora, and arable land and to pastures for livestock for these communities. The housing provided was reported to have been sub-standard and pledges to provide roads, access to land for farming, employment opportunities and running water not fulfilled. Affected communities were poorly consulted as plans were discussed with government, making it difficult for communities to engage or hold companies accountable when they did not deliver on commitments (HRW, 2013). Insufficient consideration was given to the fact that the majority of those relocated were subsistence farmers and that new land offered was insufficient, unproductive or in some cases already occupied. In the Karamoja sub-region in North Eastern Uganda, communities claimed that EI use of land squeezed them from pastoral land for cattle, raising insecurity, sexual abuse and conflict between communities and mines (Namusobya, 2015).

When local communities do not participate in decision-making on measures to address the health and social impacts of mining, as was noted in many reports, they can "...bear a disproportionate share of the costs of mineral development without adequate compensation, and receive an inappropriately small share of the economic and social benefits" (IIED, 2002:208). This is compounded by poor response to their grievances, as was for example found in early EI activities in Mozambique (HRW, 2013). Loss of livelihoods and slow response to concerns has then led to protests from resettled communities to raise attention to their concerns. This has sometimes been met with a police response (HRW, 2013; Kabemba and Nhancale, 2012).

3.3 Corporate inclusion of social and health protection

The corporate response to health and social issues is largely framed in terms of corporate social responsibility (CSR) and partnership. CSR has sometimes preceded 'hard law' duties. A World Bank-hosted panel of industry and government leaders at the Mining Indaba conference in Cape Town in 2015 on the role of EI in health raised that EIs should act in accordance with international best practice: improve mine health and safety of employees; support communities affected by mining; strengthen community health systems and enhance co-ordination between government and industry.

While OHS is identified as a legal *obligation*, protecting the health of local communities was largely identified as an area addressed by fiscal contributions and CSR. The OECD Guidelines on Multinational Enterprises thus raises tax avoidance strategies and negotiation of tax breaks in secretive contracts as a contravention of the guidelines (Lambrechts et al., 2009). Mining companies have been noted to play a role in preventing or controlling epidemics, primarily through community-level information, testing and screening, movement restrictions, logistics systems and donations to support humanitarian efforts, and not in terms of addressing the socioeconomic determinants that may be leading to epidemics (Osewe, 2015).

EI CSR strategies are often initiated in source countries, and in some cases in response to government guidance from those countries. For example, the Canadian government issued an enhanced CSR strategy for companies headquartered in Canada, drawing on international standards, to promote CSR, partnerships, dialogue towards dispute resolution and strengthen the environment affecting responsible business practices (Government of Canada, 2014).

Many companies ‘measure’ their CSR commitment in terms of the resources they allocate and their investment in non-mine social development programmes or business opportunities. Lambrechts et al. (2009) describe investments in five large EI companies in South Africa in 2007 as ranging between 0.26% and 0.99% of profits. AngloGold South Africa reports support to small-enterprise development by sourcing a substantial part of its purchases from small local firms, with additional activities to encourage new business ideas. It also provides venture capital and bridging finance for business and health programmes (IIED, 2002:214-15). A review of CSR strategies used by two mining companies in Tanzania (Geita Gold Mine in Geita owned by AngloGold Ashanti and the AFGEM mine in Mererani) cautioned, however, that sizable direct CSR cash funding was vulnerable to private capture. The review also observed a focus on visible and physical projects, reflecting more corporate public relations concerns than local community priorities (Lange and Kolstad, 2012:141). Harvey (2014) argues for CSR activities that are connected to the business of mining, such as ‘local induction’ courses, employing local people, local procurement, participating in local governance and ensuring access to infrastructure for local populations. In all these cases CSR is not seen as a substitution for the role and obligations of government, or for fair EI fiscal contributions.

While a response to concern over company reputations in the eyes of foreign and domestic stakeholders and a desire to forge good relations with local communities, CSR initiatives can also pre-empt the adoption of more formal duties and new regulations (Dupuy, 2014). Broad (2014) notes that the buzzwords of CSR can take very different meanings depending on the perspective and practice, arguing that it can involve a:

- *Neoliberal* view held by many mining executives (and some state officials) that mining is responsible if it focuses on maximizing economic growth.
- *Corporate social responsibility* view that does not involve changing production relations but that commits the corporation to using some of its profits for public good.
- *Structuralist* view that takes a beneficiary perspective and focuses on how to generate maximum economic benefits for the local country, such as through increasing taxes and ensuring a more progressive within-country distribution of these revenues.
- *Comprehensive* notion of economically, environmentally and socially responsible mining whereby economic benefits (wages, taxes, etc.) from a mine’s limited life are weighed against social and environmental impacts, involving consent of local communities and assessment of all the possible environmental impacts of mining.

As a further feature, it is argued that whatever the content area, a CSR strategy or Community Development Agreement needs to be the outcome of fair and equitable negotiation involving communities or their representatives, building shared understanding and obligations that can be monitored and reviewed (Brereton et al., 2011). The diverse interests involved in CSR, indicated in *Table 4*, call for fair process, respect and inclusion to avoid later conflict with and distrust from more marginalised groups.

Table 4: Interests in negotiations on CSR

For communities	For developers	For governments
<ul style="list-style-type: none"> • Recognition of status as traditional landowners • Acknowledgment of impacts • Compensation • Development benefits • Greater clarity around commitments of developer • A framework for ongoing engagement 	<ul style="list-style-type: none"> • Greater security of access to land and resources • Greater clarity around company obligations • Reduced conflict and disputes • A framework for ongoing engagement 	<ul style="list-style-type: none"> • Greater community acceptance of resource development • Increased development contributions from companies and opportunities to leverage from this • Greater security for generation of public revenues from projects

Source: Brereton et al., 2011.

3.4 Community responses to social and health impacts of EI activities

The previous sections have noted that EI activities have affected workers, families, resident and relocated communities in a number of ways. While EIs and states accept in principle that negative social impacts should be prevented, the previous sections suggests that there is a gap between what *should* exist and what *does* exist in relation to the social and health impacts and obligations of EIs, with poor conditions and exclusion from decision-making in some affected communities.

As discussed later, some mining laws include rights and procedures in relation to community engagement on EIs, in the negotiations around new EIs, the ongoing implementation of EIs and in relation to their obligations after their closure (Loutit et al., 2016; Toledano, 2014). However, some laws have also formally excluded communities from these processes. South Africa’s Mineral and Petroleum Resources Development Act limits the direct voice of communities by assuming that the state will represent their interests as “trustees and custodian of extractive resources” (Murombo, 2013: 48). This leaves only employed workers with a more direct formal means of engagement with EIs, often around wage demands (De Backer, 2012).

However, workers may face risks in taking up such issues. In October 2011, miners at three of four Chinese companies operating in Zambia went on strike over conditions. In response more than 1,000 workers were fired. In this case they were re-instated following government pressure, and union and government pressure led to first aid kits and ambulances being provided at mines (HRW, 2011; Shelton and Kabemba, 2012).

Workers may be less likely to take up wider community issues. Community activists in South African coal mining districts, for example, voiced concerns about EI pollution of natural resources that were vital for local economic activities. They suggested that community and trade union leaders were being compromised by job offers and by power asymmetries between communities and the companies and political elites tied to EIs, undermining transparency, accountability and the rule of law (Munnik, 2010).

The need to defend their interests and to raise accountability on EIs and their social impact has led to a range of civil society organisations (CSOs) and forms of action. In some countries, CSOs have also participated in national consultations to frame laws relevant to EI practices.

In Tanzania, CSOs have been involved in a range of advocacy, lobbying, and public interest litigation activities, pushing the government to undertake policy and legal reforms on mining. In 2008 a presidential committee (Committee to Advise the Government on Oversight of the Mining Sector) recommended a review of the country’s legal framework on mining and the creation of an environment conducive to social and economic development. Tanzania’s Mining Act 2010 provides that discussions on new mining contracts must involve representation of CSOs and local small-scale miners. This collaborative and active planning approach is argued to more directly address the needs of local communities (Massawe, 2010; ACET, 2014; Namusobya, 2015).

In Uganda, CSOs have engaged in the ongoing development of laws and institutional guidelines and standards on oil and gas. CSOs have called for Uganda's Environmental Impact Assessment (EIA) framework to be more actionable, participatory and responsive to environmental and social needs of communities, with measures for community monitoring (Twesigye, 2010). They also called for a Strategic Environmental Assessment, which considers cumulative impacts of EI projects across a wider area. The CSOs built a unified platform to strengthen their impact on current policy and legal debates. The Ugandan National Environment Management Authority (NEMA) heeded these calls and funding was secured to carry this out in the Albertine rift area of Uganda (where oil and gas were found). CSOs further called for government to provide access to information on contracts and agreements with mining companies (Twesigye, 2010).

There is also report of CSO frustration with the formal processes provided. ZELA Zimbabwe walked out of a Kimberley Process Intercessional Meeting in 2011, for example, due to perceived executive disrespect towards civil society and attempts by the process chair to push for an agreement that did not guarantee monitoring or protect CSO reporting (ZELA, 2011). The Mining Indaba, mentioned earlier, is a gathering of mining stakeholders and decision-makers that attracts about 7,500 participants with interests in mining in Africa. Perceiving inadequate voice of workers, communities and civil society in this forum, CSOs organised the People's Mining Indaba as a counter-event alongside the Mining Indaba, to formulate positions from the perspective of the affected public. It involved participants from Angola, the DRC, Kenya, Namibia, South Africa, Tanzania, Zambia and Zimbabwe to give voice to communities, share evidence and discuss priorities for action (Bambas-Nolen et al., 2013).

Where dialogue options are blocked, civil society has also used court petitions to advance its positions. In Kenya, for example, a CSO coalition brought several petitions to the Kenya National Commission on Human Rights in the early 2000s on behalf of communities in Malindi District. The petitions were in response to forcible evictions, health and safety violations, workers' rights violations, environmental degradation, and harassment by companies undertaking salt mining in the area. They reported that the local police, provincial administration, government ministries and local government were not protecting local communities. In response to this, the commission ordered in 2005 an investigation into the violations reported (Ujamaa Centre and ILEG, 2010).

In Malawi, local CSOs took the Malawi government to court for constitutional and environmental law violations in its negotiation with Paladin Africa Ltd over a uranium mine in Kayalekere. It alleged that an environmental impact study had not been conducted, that the agreement had been kept a secret, and that the project should not have progressed in the absence of national laws to regulate uranium mining (Lambrechts et al., 2009). It is not always clear how far local communities are involved in such court actions, although in Kenya, beyond the court action, the CSOs were also reported to have built local community capacities to campaign for their right to access information (Ujamaa Centre and ILEG, 2010).

4. STATE MEASURES FOR HEALTH AND SOCIAL PROTECTION

ESA countries have made a policy commitment to protect the health of citizens within economic activities and specifically to secure social benefits from EIs. The 2011 Action Plan for the Africa Mining Vision, for example, includes commitments to mainstream strategic, social, environmental, human rights, and health impact assessments into national mining policies, conducting social impact assessment as part of environmental impact assessment or alongside it (ACET, 2014). *Table 5* provides a summary of the mineral development policies in the SADC region compiled by UN ECA (2004).

Various options are used to widen social benefits from EIs. Many post-independence laws and policies in ESA countries sought to address issues of ownership and social benefit. In South Africa, for example, renewal of mining rights after 1994 depended on meeting targets for allocating shareholding to historically disadvantaged people, while in Zimbabwe, the Indigenisation and Economic Empowerment Act 2007 was used to establish community share ownership schemes giving 10% shareholding of mines to local communities (GEF, OSISA and UNDP, 2013). Some countries have obtained direct state ownership in EIs, to secure national interests, including Zimbabwe's 50% government shareholding in two diamond companies, the DRC government's 25-30% shareholding in all mining companies; the Zambia government's 20-25% shareholding in most mining companies; the Botswana government's 51% shareholding in Debswana, a joint venture with DeBeers; Namibia's 51% shareholding in NamDeb, also a joint venture with DeBeers; and the Mozambique government's 20% shareholding in all EI companies (Kabemba, 2014). Such indigenisation obligations and community share ownership schemes can benefit communities affected by mining, if 'transparently and properly handled', with controls on their use for elite benefit (ZELA, 2011:3).

Some countries use a sovereign wealth fund, such as Botswana's Pula Fund, building on examples such as Norway's Government Pension Fund Global, Kuwait's Reserve Fund for Future Generations, Libya's Oil Reserve Fund, and Nigeria's Excess Crude Account from oil revenue. Sovereign wealth funds provide a means of acquiring shares from EIs. Zimbabwe's Sovereign Wealth Fund Act 2014 aims to invest proceeds from royalties from mining of gold, diamonds, platinum and nickel in gold bullion, stockpiles of precious stones and other foreign assets, to cover budget deficits in the event of a decline in resource revenues, to undertake national development projects, to save for future generations, to reduce spending volatility, improve the quality of public spending and mitigate the effects of corruption on natural resource revenues (Mutonhoru, 2014). However, such funds are not intended to meet recurrent resource deficits. They are documented to be successful when created in conditions of budgetary surplus or absence of international debt and in enabling economic and political environments. They should have clear objectives, establish fiscal and investment rules that align with objectives, clarify responsibilities and ethical standards, ensure regular audits and extensive disclosure of key data on the fund and set strong and independent oversight and enforcement of fund rules (De Backer, 2012; Mutonhoru, 2014).

Fiscal obligations are, thus, the primary means of widening or sustaining national and social benefit from EIs, set out in existing tax laws. Zambia, Zimbabwe and Tanzania have, for example, used increased metal royalties to improve public revenues, and Mozambique sought to widen its flexibility to change tax obligations during the period of the project agreements with EIs. Zambia has implemented and South Africa and Tanzania have proposed a windfall tax on 'superprofits' from EIs, although this and royalty increases have been more difficult to impose at times of falling commodity prices (Kabemba, 2014; De Backer, 2012; Lambrechts et al., 2009). South Africa has proposed a capital gains tax of 50% on sales of prospecting rights, while Mozambique requires infrastructure investment in the EI's operating region (De Backer, 2012; HRW, 2013). In DRC, the Mining Law 2002 establishes a revenue sharing scheme that allocates funds raised from mining royalties between central government (60%), provinces (25%), and local level social service projects (15%) (Bryan and Hofmann, 2007). As a further innovation, the DRC is the first country to introduce a micro-levy on EIs as proposed by the UN Under-Secretary General in charge of Innovative Financing for Development. Introduced in September 2014, a micro-levy of \$0.10 is imposed on every barrel of oil sold by the state, and the funds are used to fight chronic malnutrition (Innovative Finance Foundation, 2014).

Table 5: Mining and Extractive Industry policies in SADC member states, 2004

	Mineral Royalty	Oil / gas royalty	Exploration fee	Surface rent	Mineral ownership	Environmental provision allowed	Mining precedence over other land uses	Special incentives in remote areas
Angola	2-5 %		US\$1-4 /km ² annum		State (National)	Yes		Yes, special tax incentives
Botswana	3-10 %		Prescribed	Landowner permission	State	No	No	Yes
DRC	20 %	Negotiable	Negotiable	Negotiable	State	No	Not Specified	Yes, tax holidays
Lesotho	2.5-10 %		Prescribed	To landowner	State (National)	Yes	Not state	No
Malawi	5-10 %	Negotiable	Prescribed	To landowner	State (National)	No	No	No, but welcomed
Mozambique	3-10 %	2-12.5 %	US\$1.00/ha	Municipal property tax	State	Yes	Yes	Yes, reduction in tax rate
Namibia	5-10 % (diamonds)	5 %	Yes	To landowner	State (National level)	Yes	No	EPZ
South Africa	State-owned = 1-5 %	Negotiable	US\$1.0 / hectare / annum	Negotiable	Mixed system	Yes	No	Yes, SDZ
Swaziland	2-3 %	Not available	See surface rent	US\$10-50 / ha /annum	State (National)	Yes	Not stated	Yes
Tanzania	0-5 %	Not specified	US\$30 /km ²	US\$1500 / km ²	State, excl ind. minerals	Yes	No	EPZ with tax incentives
Zambia	2 %		US\$1 /km ² / annum	US\$15 /km ² /annum	State (National)	Yes		Yes
Zimbabwe	1-10 %	None	Z\$121 /km ²	US\$66 /km ² /annum	State	Yes	Yes	Yes

Source: Excerpted and modified from UNECA, 2004:79. Used in accordance with UN guideline on excerpt use.

These fiscal provisions often go along with significant tax incentives, however, reversing the public revenues gained. In the past, incentives were given in some countries with commitments that counteracted later legal or fiscal reforms. In Zambia, for example, the 1995 Mines and Minerals Act gave a range of incentives to EI investors, including tax deductions, relief from customs duties on imported machinery, and allowed the government to sign ‘development agreements’ with specific companies that permitted *more* incentives than those granted by the Act. In 2008, faced by civil society and opposition party pressure, this law was revised to increase corporate and mineral royalty taxes and to introduce the windfall tax referred to earlier. However, government had earlier signed off on ‘stability periods’, undertaking not to amend agreements for as long as 15-20 years after signing, regardless of law reforms, a provision that in retrospect is seen to have been undesirable in unduly binding the government (Lungu, 2008).

This type of restriction of policy space is noted to occur more widely in ESA countries. Besada and Martin (2013:22) note that mining codes have restricted the policy space available to African governments to ensure a developmental role for EIs, locking African states “into bilateral treaties which protect the interests of foreign investors and restrict the scope for public policy-making”. Poorly negotiated contracts, tax subsidies and concessions have cost countries significant revenue: in South Africa, \$359-\$499 million a year based on 2006 earnings for refined and unrefined metals; in Tanzania \$29 million a year between 2002 and 2006; in Malawi \$16.8 million annually in the 11-year Paladin Africa Ltd mine project; and in DRC \$360 000 annually between 2001 and 2003 for one mine contract only (Lambrechts et al., 2009).

In addition to these subsidies there is also report of a high incidence of tax avoidance by mining companies through corporate mergers and acquisitions, clandestine foreign exchange outflows, short-term imported consumption and various creative accounting mechanisms (Lambrechts et al., 2009; AU, 2009).

Few examples were found in the literature of legal duties on EIs to promote local beneficiation. Tanzania banned export of rough tanzanite stones in 2010 through the Mining (Mineral Beneficiation) Regulations 2010, under the Mining Act 2010, to boost the local cutting and polishing industry, although this was also noted to have led to illegal smuggling of the stones (De Backer, 2012). In Zimbabwe, the Minerals Marketing Corporation of Zimbabwe (Diamond Sales to Local Diamond Manufacturers) Regulations, Statutory Instrument 157, 2010, includes provisions seeking “to ensure that local diamond cutters and polishers also benefit from the resource and to promote value addition in the mining sector” (ZELA, 2011:7). ZELA (2011) notes challenges to implementing these provisions, however, in part due to lack of equipment to cut and polish diamonds and lack of transparency and accountability in the processes.

There are also conflicting interpretations of which laws have priority where there is conflict between EI investments and social or other economic impacts. For example, South Africa’s Minister of Mineral Resources sided with a company to argue that local governments could not prevent mining companies from beginning activities if a license had been issued under the Mineral and Petroleum Resources Development Act 2002 – a claim that the country’s Constitutional Court rejected, arguing that mining companies must also comply with municipal planning and zoning permissions (*Maccsand (Pty) Ltd v City of Cape Town and others 2012; Le Sueur and Another v Ethekwini Municipality and Others 2013*) (Murombo, 2013:48).

Section 6 discusses more specifically the various laws and provisions for protection of health in EIs. The literature review suggested that countries with long-standing mining sectors have more developed policies, laws and institutions for managing the social aspects of EIs. South Africa’s mining industry is, for example, highly regulated. Policies, laws and other measures are argued to be more likely to succeed where there is effective minerals management, transparency and accountability; a commitment to citizen welfare; a stable socio-political environment that enables proper regulation of extraction, processing and marketing of natural resources; financial management and monetary laws that attract investment; and good partnerships between government and private sector with a commitment to sustainable extraction and use of resources (Bryan and Hofmann, 2007). Botswana is cited as a successful example of this in the ESA region, attributed to strong leadership and governance and effective dialogue processes (Kabemba, 2014).



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The state has various ways of exercising power to ensure social protection or the implementation of EI obligations. Zambia uses audits to review performance, while DRC, Zimbabwe, South Africa and Mozambique use contract/lease renegotiations or renewals to review, require or impose new obligations (GEF, OSISA and UNDP, 2013; De Backer, 2012; Kabemba, 2014). Environmental impact assessments (EIAs) are one tool provided in current law for assessing and planning for EI impacts, as for example provided for in Botswana's Environmental Impact Assessment Act 2005 (OSISA and UNDP, 2013). If implemented and enforced, clauses providing for access to information in environmental regulations and more generally in constitutions and other laws can promote social and environmental accountability in EIs (GEF, OSISA and UNDP, 2013; De Backer, 2012).

Oversight of EIs is, however, noted to be potentially compromised because the same government executives who oversee regulation of EIs also encourage their economic contribution (Bryan and Hofmann, 2007). It is thus argued that steering committees overseeing environmental and health impact assessments should include government, community, civil society and industry representatives and environmental consultants (ACET, 2014). Public information access is also argued to be important, given the role of public pressure in achieving legal and policy improvements, as noted in Zambia (to introduce the windfall tax), in Mozambique (to improve resettlement laws) and in Malawi (to address uranium mining risks) (Lambrechts et al., 2009).

Further, even where laws exist, the state needs capacities to enforce them. Legal changes may proceed more rapidly than the growth in this capacity, especially when public revenues are constrained or significant interests are involved, as is often noted with EIs. Enforcement may thus often be reliant on voluntary compliance and reporting by EIs (Murombo, 2013).

In many countries, and particularly those with new mining operations, the state appeared to be less well prepared to manage the social issues in the growth of EI activities, and laws were often introduced after social reaction or pressure. In Mozambique, the legal instrument to guide resettlement was only introduced in August 2012 after community unrest due to poor resettlement conditions. It is still regarded as having gaps in grievance redress mechanisms, while the law guiding involuntary resettlement is spread over a series of legal documents that complicate their application (Min PD Moz, 2013). In Malawi, the national mining laws did not address the risks posed by new uranium mines, and the churches and local NGOs took court action to block uranium mining until appropriate laws were in place (CRS, 2011). In DRC, retrospective attention was given to contracts with EIs signed during the 1996-7/8 wars. A special commission was created for this within the transitional legislature (NDIHA, 2007).

These reforms are being introduced at a time when the investment resources from EIs make them powerful lobbies, including in relation to other sectors. In Zimbabwe, for example, the Mines and Minerals Act overrides communal land laws. Once minerals have been discovered and mining prospecting rights have been granted, there is little within the law to stop these activities, even if other activities will suffer (Murombo, 2013).

The relative precedence of different legal provisions, some of which are not specific to EIs, thus has relevance. Further, as noted in this section, even where policy commitments and legal intentions exist, various factors affect the extent to which they are translated into practice. While the next sections focus on laws and their provisions as a basis for legal guidance, it does not discount the fact that attention also needs to be given to ensuring the state capabilities – and willingness – to implement the law and to a level of public information, social capacities and voice that can ensure and hold the state accountable for implementation.

5. INTERNATIONAL AND REGIONAL GUIDANCE ON EI ACTIVITIES

5.1 International standards and guidance

There are many international standards, codes or guidance documents. International treaties and instruments are first and foremost addressed to governments and, apart from ratification or accession, often require separate (national) parliamentary approval and the enactment of national legislation to give domestic effect to that treaty.

Human rights principles are set out in the Universal Declaration of Human Rights (UDHR), the International Covenant on Civil and Political Rights (ICCPR), the International Covenant on Economic, Social and Cultural Rights (ICESCR). They also include the principles concerning fundamental rights set out in the ILO's Declaration on Fundamental Principles and Rights at Work. Potentially vulnerable or marginalised individuals and groups are, in addition, the subject of specific instruments including the UN Declaration on the Rights of Indigenous Peoples (UNDRIP).

ICESCR Article 12 provides a duty on states to ensure “the right of everyone to the enjoyment of the highest attainable standard of physical and mental health”, including to: ensure the healthy development of children; improve environmental and industrial hygiene; prevent, treat and control diseases; and ensure universal access to healthcare. It requires states to ‘respect’, i.e.; to refrain from interfering directly or indirectly with the enjoyment of the right to health; to ‘protect’ i.e., to take measures that prevent third parties – including EIs – from interfering with Article 12 guarantees; and to ‘fulfil’ i.e., to adopt appropriate legislative, administrative, budgetary, judicial, promotional and other measures towards the full realization of the right to health.

Other international standards include (OECD, 2009; Government of Canada, 2014; IFC, 2010; Equator Principles, 2006):

- **UN and international guidance:** the 2011 UN Guiding Principles on Business and Human Rights; Voluntary Principles on Security and Human Rights; Kimberley Process; Global Reporting Initiative; ILO Core Conventions, UN Framework Convention on Climate Change, ILO Multinational Enterprise (MNE) Declaration, UN Global Compact Principles, Extractive Industries Transparency Initiative (EITI) Principles; and WHO Air Quality Guidelines;
- **OECD guidance:** Guidelines for MNEs; Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas.
- **Financial institution guidance:** viz the Equator Principles (which includes the International Finance Corporation (IFC) Performance Standard on Land Acquisition and Involuntary Resettlement); International Finance Corporation's Performance Standards on Social and Environmental Sustainability;
- **CSR standards developed by business,** including GRI Sustainability Reporting Guidelines; Responsible Care Guidelines; the Global Mining Initiative; Mineral and Sustainable Development project of the International Council on Mining and Metal and the ICMMS Sustainable Development Principles; and
- **Civil society guidance,** including the Natural Resource Charter and Initiative for Responsible Mining Assurance.

Table 6 summarises the scope of these key international instruments in relation to EIs.

Besada and Martin (2013:14-15) describe these standards as a “new wave of natural resource governance initiatives“ driven by a host of heterogeneous actors, including corporations and state governments, regional organisations and domestic and international civil society groups. They assume that EI activities can have a positive impact on the lives of communities if managed and undertaken in a transparent and accountable way.

Companies have themselves used these standards: An undated survey sent out to companies by InterPraxis in Mozambique found that companies had committed to the following international standards (percent total in brackets):

- ILO Declaration on Fundamental Principles and Rights at Work (40%)
- Extractive Industries Transparency Initiative (40%)
- UN Universal Declaration of Human Rights and related protocols (30%)
- Voluntary Principles on Security and Human Rights (30%)
- OECD Guidelines for Multinational Enterprises (30%)
- IFC Social and Environmental Performance Guidelines (30%)
- UN Global Compact (20%)
- UN Declaration on the Rights of Indigenous Peoples (10%) (InterPraxis, 2012).

Table 6: International documents and guidelines relevant to health in EIs

Document	Outline
GOVERNMENTAL	
UN Universal Declaration of Human Rights	Adopted by the United Nations in 1948 describes the rights and freedoms of every human being “without distinction of any kind”
UN International Covenant on Civil and Political Rights	Adopted by the UN General Assembly on 16 December 1966 and entered into force on 23 March 1976, the ICCPR contains provisions on various civil and political rights affecting the right to health
UN International Covenant on Economic, Social and Cultural Rights	Adopted by the UN General Assembly on 16 December 1966 and entered into force on 3 January 1976. In Article 12, it establishes “the right of everyone to the enjoyment of the highest attainable standard of physical and mental health”, and steps to be taken by states parties to achieve it. Article 12 states THE need to ensure: availability; accessibility; acceptability; and quality and to respect, protect, and fulfil the rights. Includes related rights, such as the right to work under safe and healthy working conditions and within reasonable working hours and special protection for pregnant women/new mothers and children
UN Declaration on the Rights of Indigenous Peoples - UNDRIP	A comprehensive international instrument on individual and collective rights of indigenous peoples, e.g., their rights to culture, identity, employment, health and education
UN Guiding Principles on Business and Human Rights	A set of global standards for identifying, preventing and addressing the impacts on human rights from business activity, endorsed by the United Nations Human Rights Council in 2011, and the first document on corporate human rights responsibility to be endorsed by the United Nations. Encompasses three principles: i. the state duty to protect human rights; ii. the corporate responsibility to respect human rights; and iii. access to remedy/redress for victims of business-related human rights abuses. Guide EIs to adopt a policy commitment to human rights, carry out human rights due diligence and provide remedies for rights impacts
ILO Declaration on Fundamental Principles and Rights at Work	Adopted in 1998, commits states to respect and promote principles and rights to freedom of association and the effective recognition of the right to collective bargaining, the elimination of forced or compulsory labour, the abolition of child labour and the elimination of discrimination in employment and occupation
ILO Tripartite Declaration of Principles concerning multinational enterprises and social policy	Guidelines to MNEs, governments, and employers’ and workers’ organisations on employment, training, conditions of work and life, and industrial relations, as reinforced by ILO conventions
ILO Safety and Health in Mines Convention	Adopted in 1995 sets duty for states that have ratified it and their employers to apply through law prevention of fatalities, injuries or ill health affecting workers or members of the public, or damage to the environment from mining operations
United Nations Global Compact	An initiative by the United Nations to encourage businesses to adopt and report on sustainability and socially responsible policies, focusing on issues around human rights, labour, the environment, and anti-corruption

Table 6: International guidelines relevant to health in EIs, continued

Document	Outline
International Finance Corporation (IFC) Performance Standards	2012 standards for IFC clients on managing environmental and social risks in i. labour, working conditions; ii. resource efficiency, pollution prevention; iii. community health, safety, security iv. land acquisition, involuntary resettlement
OECD Guidelines for Multinational Enterprises	Voluntary principles/standards for multinational enterprises (MNEs) in/from 34 OECD countries plus eight non-OECD countries (none in ESA) for responsible business conduct, including on employment, industrial relations, rights, environment, information disclosure, competition, tax, science and technology
African Charter on Human and People's Rights	An international human rights instrument that is intended to promote and protect human rights and basic freedoms in the African continent
African Mining Vision	Adopted by Heads of State in a 2009 African Union summit, Africa's response to tackling mineral wealth existing side by side with pervasive poverty
OTHER	
International Council on Mining and Metals Good Practice Guidance on Health Impact Assessment 2010.	A tool to assist companies in protecting the health and well-being of their workforce and local communities, describing processes, methods for a rapid assessment and advocating integration of health with environmental and social impact assessments, with management tools to achieve this
ICMM Good Practice Guidance on Occupational Health Risk Assessment, 2009	An information resource for Occupational Health Risk Assessments with thirteen steps to identify workplace hazards and their risks to health and to determine and evaluate appropriate control measures to protect the health and well-being of workers
ICMM Good Practice Guide: Indigenous Peoples and Mining, 2015.	Aimed at providing guidance to companies on good practice where mining-related activities occur on or near traditional indigenous land and territory
ICMM, Planning for Integrated Mine Closure: Toolkit, 2011	Guidance for closing a mine in a sustainable manner, addressing social, environmental, health, human rights impact/opportunity assessments and engagement with stakeholders to ensure lasting community benefits locally
Extractive Industries Transparency Initiative (EITI)	A global EITI Standard for revenue transparency and accountability in EI sector with a robust, flexible method to monitor and reconcile company payments and government EI revenues in a locally adapted process for country compliance
Danish Institute for Human Rights (DIHR) Guide for Integrating human rights into environmental, social and health impact ass.	2013 Guide with the global oil and gas industry association for environmental and social issues on how to integrate human rights into environmental, social and health impact assessments (ESHIA) to evaluate projects and activities
Voluntary Principles on Security and Human Rights and Implementation Guidance Tools, 2011	Sets guidelines for companies for their security methods, based on the UN Code of Conduct for Law Enforcement Officials and the UN Basic Principles on the Use of Force and Firearms by Law Enforcement Officials, supported by tools set by ICCM, ICRC, International Petroleum Industry and IFC to implement the guidelines particularly in areas of geographical conflict and weak governance
International Organization for Standardization (ISO) ISO 26000, 2010	Standards for social responsibility. Does not contain requirements, and is therefore not certifiable. Encourages companies to discuss social responsibility matters with relevant stakeholders, to promote transparency and participation
Institute for Human Rights and Business Guide for Investors on Business and Human Rights	Shows investors how to integrate human rights into investment decision-making and corporate engagement, applying the UN Guiding Principles on Business and Human Rights, so investors can assess and address human rights risks in their portfolios and more effectively benchmark and engage the companies they hold
The Natural Resource Charter	A global initiative providing economic principles for governments and societies with twelve principles on the choices and strategies to pursue to support sustained economic development from natural resource exploitation

Sources: DIHR and IPIECA 2013; EU, 2006; EITI, 2016; Equator Principles, 2006; ICMM, 2009, 2010, 2011, 2105; IFC, 2010, 2012; ILO, 1995,1998, 2014; ISO 2010; OECD, 2009, updated 2011; SADC, 1977; UN, 1966a, b, 2000, 2007, 2011

Some principles have relevance to specific aspects of practice: The European Union (EU) directive on waste management from EIs outlines measures to require that extractive waste is managed without endangering human health and duty on EIs to prevent adverse effects on the environment and human health, to provide public information and to set up waste management plans that involve recycling, reusing or reclaiming waste where possible and safe disposal of waste (EU, 2006). WHO (2011) argues for investment agreements with multilateral financial institutions to incorporate environmental and social performance standards, including for EIAs, HIAs, public participation and information disclosure, and access to grievance mechanisms.

The Santiago Principles, as a further example, set IMF standards of good fund governance and transparency in relation to sovereign wealth funds, against which national laws and practice can be assessed (Mutonhori, 2014). *Table 7* outlines their key areas.

Table 7: Santiago principles for sovereign wealth funds

Operations	Investments	Management	Transparency
Clear fund objectives	No use of revenues as collateral	Role of government agencies defined	Formalised oversight mechanism
Rule for how much can be withdrawn per year	Clear investment rules aligned with objectives	Penalties for misconduct	Regularly compiled fund reports for public disclosure
Rule for revenue deposits aligned with objectives	Investment risk limitations	Ethical standards for managers and staff	Public disclosure of internal audit reports
	Publication of investment portfolios	Responsibilities of investment managers	

Source: Mutonhori, 2014.

The Extractive Industries Transparency Initiative has been used in many ESA countries. It is made up of EITI Principles that require disclosure of payments and government accountability, and that facilitate public understanding (Moffatt and Haralampieva, 2014:8-9). It operates through a tripartite, consensus-based governance model, involving civil society, government and industry, on an equal footing, in developing and monitoring implementation of policy. By 2012, Mozambique, DRC and Zambia had implemented two rounds of EITI reporting, Madagascar had published one report and Zimbabwe had set up a Mining Revenue Transparency Initiative Oversight Group, which includes government, mining companies and civil society (von der Goltz and Barnwal, 2012). There is some cautiously stated evidence that the EITI process has widened community benefit of wealth from EIs in countries that had recently completed an EITI report (von der Goltz and Barnwal, 2012). While the process has involved civil society, African civil society has also expressed concern that additional support be given to building community capacities, improving contract transparency and improving income distribution through equitable delivery of social services (SARW and EITI, 2012). Indigenous peoples are often subject to social exclusion, often due to indigenous land and resources being expropriated, including by EIs. Specific provisions in the UN Declaration on the Rights of Indigenous Peoples address rights to culture, identity, employment, health and education, but need to be backed by policies on land, for inclusive resource management and for fair benefit sharing.

Beyond these international standards and guiding documents, there are also laws in countries that have extra-territorial scope (i.e., where prosecution can take place even when the infringement occurs in another country). This applies for example in relation to anti-bribery laws. The UK Bribery Act 2010, the Canada Corruption of Foreign Public Officials Act (CFPOA) as amended 2013, the OECD Anti-Bribery Convention (including Canada, Australia and Russia) and the Peoples Republic of China Criminal Code 2011 all allow prosecution of extra-territorial bribery (De Backer, 2012). The USA Dodd-Frank Act requires disclosure of origin of materials in mineral products and of payments made to governments for commercial exploration of oil, gas and minerals (Moffatt and Haralampieva, 2014) and the Canada Extractive Sector Transparency Measures Bill (2014) establishes mandatory reporting and transparency measures (Government of Canada, 2014). The EU Accounting Directive of 2013 includes wide-reaching disclosure obligations, including disclosure of payments over €100,000 made to foreign governments in a financial year (Moffatt and Haralampieva, 2014).

5.2 African continental and regional standards and guidance

As noted earlier, there is a policy intention in Africa to ensure national and social benefit from EI activities. The African Union (AU) African Mining Vision seeks to make the mining sector part of a “diversified, vibrant and globally competitive” African economy, through a “knowledge driven African mining sector” that contributes to growth and development, that is “sustainable and well-governed”, that “effectively garners and deploys resource rents and that is safe, healthy, gender and ethnically inclusive, environmentally friendly, socially responsible and appreciated by surrounding communities” (AU, 2009:3). The EU is reported to have recognised this policy framework as the basis for EU-AU Cooperation on mining (Besada and Martin, 2013). It departs from Washington Consensus views of ‘governments as mere regulators of private security’ and re-introduces the idea of the ‘developmental state’ (Besada and Martin, 2013:18). It refers to the EITI Principles (discussed earlier) and raises a number of platforms for monitoring standards on EIs, including the AU’s Africa Peer Review Mechanism (APRM), the Kimberley Process by states, and the Global Reporting Guidelines and the Publish What You Pay Campaign by civil society (AU, 2009). The African Commission on Human and People’s Rights has further established a Working Group on Extractive Industries, Environment and Human Rights Violations in Africa to examine the impact of EIs in Africa, including in relation to violations of human rights. It also seeks to propose measures and activities for the prevention and reparation of violations of human and peoples’ rights by EIs (Manirakiza, 2012).

African states are noted to have moved towards a ‘strength in numbers’ approach to legislating mining codes, with efforts to harmonise laws at sub-regional level throughout the continent, including “increased monitoring mechanisms, frameworks for improved administrative systems, and single points of contact for licensing and regulatory approvals” (Besada and Martin (2013:21). One example of this is the ECOWAS Directive on the Harmonization of Guiding Principles and Policies in the Mining Sector. Another is the Southern African Development Community (SADC) Protocol on Mining 1997 (in force in February 2000) and the UN Economic Commission for Africa (UN ECA)/SADC Harmonisation of Mining Policies, Standards, Legislative and Regulatory Framework in Southern Africa. The latter includes an intention to develop and implement common standards in terms of health, safety and environment (AU, 2009; Murombo, 2013). The SADC Protocol on Mining sets commitments to: “promote sustainable development by ensuring that a balance between mineral development and environmental protection is attained” (SADC, 1997: Article 8.1), including through regional approaches to environmental impact assessments to deal with cross-border effects of mining on the environment (Article 8.2). It also seeks to strengthen co-operation across countries to improve “the practices and standards of occupational health and safety in the region’s mining sector” (Article 9.1) (SADC 1997).

The UN ECA/SADC Harmonization of Mining Policies, Standards, Legislative and Regulatory Framework in Southern Africa provides guidance in relation to: mineral policies, political, economic and social environment, general investment environment, mining fiscal environment, artisanal and small-scale mining, research and development, human resources and skills development and gender (UN ECA, 2004). It recommends that mineral policies take into consideration health and safety, gender, housing and living conditions, labour relations, health, safety and environmental standards up to international level and employment conditions, including to strengthen women’s participation in mining. It recommends that countries pursue regional strategies to tackle HIV/AIDS, implement laws for integrated environmental management, including environmental and social impact assessments, and make financial provision for rehabilitation of land and reduce adverse impacts on community livelihoods. It sets out obligations on post-mining use of land and monitoring of the environmental impact after operations have ceased and recommends the establishment of a Minerals Development Fund in each country “to provide for environmental disasters and social decline after mine closure” (UN ECA, 2004:36-37). It further recommends empowerment and participation of local populations in EI activities and the linking of CSR to the granting of mineral licenses (UN ECA, 2004). A Southern Africa Resource Barometer developed by the by Southern Africa Resource Watch and the SADC Parliamentary Forum (SADC-PF) acts as a further guide for SADC parliaments and governments with simple and clear principles to measure “transparency, accountability and equity in the management and distribution of mining benefits” (Kabemba, 2014:8).

African countries outside the ESA region are also improving laws relating to EIs. These include:

- Nigeria's Extractive Industries Transparency Initiative 2007, which made the EITI principles mandatory, albeit with implementation challenges due to the law's broad and sometimes unclear remit and confidentiality clauses and due to insufficient and overlapping state capacities and functions and weak sanctions for non-compliance (Okeke and Aniche, 2013).
- Sierra Leone's proposal for a resource rent tax in its Extractive Industries Revenue Bill that is argued to potentially raise enough money for the country to finance its Free Healthcare Initiative (abolishing user fees for pregnant women, breastfeeding mothers, and children under five) and its Abuja Target of healthcare spending at 15% of the government budget (Sharples, 2015). Equally, state capacities for audit and tax collection would need to be strengthened to collect the taxes and to avoid tax evasion and avoidance.
- Work being done to establish a Natural Resources Charter Benchmarking Framework for Sierra Leone to promote accountability and good governance in EI sector; and
- Plans for a study to harmonise mineral taxation and licensing regimes in Sierra Leone, Liberia, Guinea and Côte d'Ivoire to avoid a competitive 'race to the bottom' (Sharples, 2015).

Outside Africa, other countries with EIs provide examples of laws that can inform ESA countries:

- On community participation: In the Philippines, the Mining Act institutionalises local government and civil society engagement in decision making on EIs and requires local stakeholder involvement in decisions impacting their lives. In New South Wales, Australia, community involvement is legally required at all stages of mining processes, and EIs are required to establish a Community Consultative Committee as a discussion forum. Papua New Guinea has a nationally mandated development forum process to increase local participation in decisions on the distribution of benefits from EIs (InterPraxis, 2012).
- Social investment is made obligatory in some countries' mining laws. Sierra Leone's Mining and Minerals Act 2009 requires EIs to sign community development agreements and expend 1% or more of gross revenue amount earned in previous years' mining operations on the agreed aspects of the agreement, for every year the agreement is in force. Peru has a 'Voluntary' Mining Fund negotiated between government and mining companies that requires them to contribute 2-3.5% of pre-tax profits to social welfare and development programmes. Companies manage the funds, although in 2012 it was reported that the government was seeking to take over management of funds and increase the contribution, with resistance from companies.
- Promotion of EI obligations for local employment, use of local services or local enterprise development, as in Kazakhstan's 2009 Oil & Gas Law and Indonesia's Draft Ministerial Decree on Community Development 2011 (InterPraxis, 2012; Devi and Prayogo, 2013).

Appendix 3 details the specific provisions in international and African continental standards within key areas of health and social protection. *Table 8 overleaf* summarises the provisions in international standards within the 10 key areas identified in the literature review.

Some African countries have begun to use these international standards to review their own laws, including in relation to health (Osewe, 2015). In South Africa, the King Committee Report on Corporate Governance 2009 sought to bring local companies in line with global best practices (GEF, OSISA and UNDP, 2013).

Kenya similarly sought to adopt the UN Guiding Principles on Business and Human Rights, by initiating The Nairobi Process: A Pact for Responsible Business, applying the principles to the emerging oil and gas sector (Samuel, 2015). InterPraxis (2012) formulated a CSR policy for Mozambique using the 2010 ISO Guidance on social responsibility and the European Commission's 'A renewed EU Strategy 2011-14 for Corporate Social Responsibility'. Through stakeholder engagement in Mozambique they evaluated each issue area in terms of: social norms, laws, international standards, government development strategies; EI practices; stakeholders' concerns; and policy commitments to identify those issues that were prioritised to be covered by a CSR framework (InterPraxis, 2012). The next section explores how far the international standards for health and social protection in EIs in *Table 8* are being applied in ESA country laws.

Table 8: Key provisions from international standards for assessment of ESA law

Broad categories	General provisions in international documents (see key for numbered references)
GENERAL PROVISIONS, GOVERNANCE AFFECTING HEALTH OBLIGATIONS	
Consultation and protection of health in negotiation of prospecting rights/licenses.	<ul style="list-style-type: none"> Respect human rights, avoiding infringing on the rights of others and addressing negative impacts with which they are involved (1,2,5) Integrate health impact within environment, social impact assessment (3) Integrated assessment to identify the environmental and social impacts, risks, and opportunities of projects (4)
Health and social protections in resettlement/relocation of affected communities	<ul style="list-style-type: none"> No arbitrary or unlawful interference with privacy, family and home and protection of minors; avoid forced eviction (6) Avoid, and when avoidance is not possible, minimize displacement by exploring alternative project designs (4) Ensure resettlement activities are implemented with appropriate disclosure of information, consultation and informed participation of those affected (4) Improve, or restore, livelihoods, adequate housing and living standards of displaced persons; with security of tenure at resettlement sites (4)
General governance issues	<ul style="list-style-type: none"> Freedom of information; right of peaceful assembly; freedom of association, including forming and joining trade unions (6, 9)
General governance issues (Cont)	<ul style="list-style-type: none"> Self-regulatory practices and management systems that foster confidence and mutual trust between enterprises and societies in which they operate (11) Discuss social responsibility matters with all relevant stake holders (11) Access to effective remedies for victims of business-related human rights abuses, both through judicial and non-judicial means (1)
SPECIFIC HEALTH, PUBLIC HEALTH, OCCUPATIONAL HEALTH PROVISIONS	
OHS for employed workers/sub-contractors	<ul style="list-style-type: none"> No forced, compulsory or child labour; reasonable working hours (6,7,9) Identification, analysis of workplace hazards to assess and control risks to health, fatalities, injuries and to protect health and well-being of workers (1,6,8,10,11,13) Make available to workers' representatives, competent authorities and the workers' and employers' organisations information on the safety and health standards relevant to their local operations, those observed in other countries, and relevant special hazards and protective measures (8,11,12) Freedom of association and rights to collective bargaining (7) Disseminate policies, including through education and training on environmental health and safety, handling of hazardous materials and the prevention of environmental accidents, environmental impact assessment (7,10,11)
Health benefits	<ul style="list-style-type: none"> Environmental and industrial hygiene; and access to medical care (2,14)
Environment, health and social protection for surrounding communities	<ul style="list-style-type: none"> Avoid or minimize the risks and impacts to community health, safety, and security, environment that may arise from project-related activities, with particular attention to vulnerable groups; prevent fatalities, injuries or ill health affecting members of the public arising from mining operations and minimize and/or compensate for such impacts (1,4,5,9,10,11,15,16) Provide public and employees with adequate, timely information on potential health, environment and safety impacts of the enterprise, consult communities directly affected; maintain plans for preventing, mitigating and controlling health and environmental damage from operations, including accidents and emergencies; and mechanisms for immediate reporting to the competent authorities (4, 9,10,11) Fair and adequate compensation for violation of rights and fair and mutually acceptable procedures to resolve conflicts (1)
EI fiscal contributions to health/health care	<ul style="list-style-type: none"> Refrain from seeking or accepting exemptions not contemplated in the statutory or regulatory framework related to environmental, health, safety, labour, taxation, financial incentives or other issues (11)

Key: 1. UN Guiding Principles on Business and Human Rights and the UN Protect, Respect, Remedy Framework; 2. International Covenant on Economic, Social and Cultural Rights; 3. ICMM Good Practice Guidance on Health Impact Assessment, 2010; 4. IFC Performance Standards 2012; 5. Natural Resource Charter; 6. International Covenant on Civil and Political Rights; 7. ILO Declaration on Fundamental Principles and Rights at Work; 8. ILO Tripartite declaration of principles concerning multinational enterprises and social policy; 9. UN Global Compact; 10. ILO Safety and Health in Mines Convention; 11. OECD Guidelines for Multinational Enterprises; 12. ICMM Good Practice Guidance on Occupational Health Risk Assessment, 2009; 13. African Mining Vision; 14. African Charter on Human and Peoples' Rights; 15. UN Protect, Respect, Remedy Framework; 16. UN Declaration on the Rights of Indigenous Peoples.

6. APPLICATION OF INTERNATIONAL GUIDANCE IN ESA LAWS



The background literature review identified a number of laws in ESA countries to manage the social and health issues in EI activities. The online searches revealed additional laws, with those sourced and included in the analysis shown in *Appendix 2*. This section presents a content analysis of the laws sourced to identify the extent to which they cover key areas of international standards relating to health and social protection shown in *Table 8*. The analysis separated those areas of law that:

- i. Are general provisions relating to protection of health in negotiation of prospecting rights/licenses/agreements, in resettlement/relocation of affected communities and general governance issues;
- ii. Concern more specific health-related issues, including OHS; health benefits for workers and families; environment, health and social protection for surrounding communities and EI fiscal contributions towards health and health services.

We identify whether there is a difference in how these areas are covered in countries with older EI sectors, including DRC, South Africa, Tanzania, Zambia, Zimbabwe, Angola and Botswana, compared to countries with more recent EI activity, such as Mozambique, Malawi and Uganda.

The legal provisions are shown in more detail in *Appendix 4*. As noted in the methods section, the laws are changing, with some evidence of reforms improving health and environment protections. For example, the more recent Mines and Mineral Development Act, 2008, in Zambia not only sets out requirements in relation to exploration, exploitation and processing of mineral resources, but also protects human health and environment (Bryan and Hofmann, 2007). There may have been recent bills or new acts that were not available to us that we have not included in this review.

6.1 Provisions in ESA laws relating to health protection in EIs

This sub-section covers the provisions in ESA laws, i.e.: those relating to protection of health in negotiation of prospecting rights, in resettlement of affected communities; the provisions for OHS for workers in EIs; health benefits for workers and families; and the environment, health and social protection for surrounding communities (shown in summary in *Table 9* and as full legal provisions by country in *Appendix 4 Table A1*). It also covers the provisions for health benefits for surrounding communities; the fiscal contributions for health and health services; forward and backward links with local sectors and services; use of wealth funds, community ownership for local well-being; post-mine closure obligations and general governance issues (shown in summary in *Table 10* and as full legal provisions by country and thematic area in *Appendix 4 Table A2*).

All ESA countries have included some level of consultation and **protection of health-related issues in negotiation of prospecting rights/licenses and EI agreements**, although this is most commonly in terms of environmental protections and implemented through environmental impact assessments (EIAs) (e.g., Angola's Mining Code and General Environment Law). The laws do not explicitly refer to health or assessment of social impacts in all ESA countries, although some, such as Kenya's Environmental Management and Co-ordination Act Secs 42 and 101, do explicitly refer to reports and plans that include social, health and safety impacts. South Africa's Mine Health and Safety Act Sec 23 requires proven ability to comply with the health and safety duties in the Act for a mining right to be granted, while Zambia's Mines and Minerals Act Sec 80 requires measures to protect harm to human health as a condition for granting of a mining right. Notably, no ESA public health acts sourced include obligations for health impact assessments, although some of these laws are under review, and this has been included in proposed amendments (e.g. Zimbabwe). Mozambique's Mining Law Art 8 provides comprehensive duties in relation to social and economic measures and community consultation and benefits in addition to EIAs, and further in Art 36, uniquely in ESA, sets duties to promote public health in line with national and 'international applicable legislation', implying a duty for good health practice as set in UN standards and source country laws. The period of the EIA or need for follow up EIA is not always stated. Madagascar's Mining

Code Art 37 sets a license period of 40 years following an EIA, but it may be argued that new conditions should require updated EIA reports as part of more regular renewal of licenses.

Table 9: National legal provisions for areas from International guidance, ESA countries

The table shows the Acts that include provisions relevant to the area in the column. The shading indicates how far the area is covered: the better covered the darker the shading

	Consultation and protection of health in negotiation of prospecting rights / licenses and EI agreements	Health and social protections in resettlement / relocation of affected communities	OHS for employed workers / contractors	Health benefits for workers and families	Environment, health and social protection for surrounding communities
Angola	Gen Environ Law Mining code	Gen Environ Law Mining code	Mining code	Mining code	Gen Environ Law Mining code
Botswana	Mine and Minerals Act	Mine and Minerals Act	Mines, quarries, Works & Machinery Act and regulations; Public Health Act	Public Health Act	Mine and Minerals Act; Public Health Act
Democratic Republic of Congo	Mining code and regs	Constitution; Mining code and regs	Constitution; Labour Code; Mining code and regs	Constitution; Labour and Mining codes	Constitution; Mining code
Kenya	Constitution; Environmental Management and Coordination Act; Mining Act	Constitution; Environmental Management and Coordination Act; Mining Act	Constitution; Occ Safety and Health Act; Mining Act; Work Injury Benefits Act	Constitution; Occ Safety and Health Act	Constitution; Environmental Management and Coordination Act; Mining Act
Lesotho	Environment Act; Mines and Minerals Act	Mines and Minerals Act	Labour Code; Mine Safety Act	Environment Act; Labour Code	Environment Act; Mines and Minerals Act
Madagascar	Environmental Protection Reg; Mining Code	Constitution: Environmental Protection Reg	Mining code	Constitution but nothing EI specific	Constitution; Environmental Protection Reg
Malawi	Environment Management Act	Constitution; Mines and Minerals Act	Constitution; Mines and Minerals Act and Regs; Occupational Safety, Health and Welfare Act	Constitution; Mines and Min Act OSH & Wel-fare Act; Public Health Act	Environment Management Act; Mines and Minerals Act
Mauritius	No extractive mining / EI sector				
Mozambique	Mining Law	Mining Law; Regs for the Resettlement Process Resulting from Economic Activities	Labour Law; Mining Law	Labour Law; Mining Law	Mining Law; Regs for the Resettlement Process

Table 9: National legal provisions for areas from International guidance, ESA countries, continued

The table shows the Acts that include provisions relevant to the area in the column. The shading indicates how far the area is covered: the better covered the darker the shading

	Consultation and protection of health in negotiation of prospecting rights / licenses and EI agreements	Health and social protections in resettlement / relocation of affected communities	OHS for employed workers / contractors	Health benefits for workers and families	Environment, health and social protection for surrounding communities
Namibia	Environment Man Act; Minerals (Prospecting and Mining) Act	Constitution; Minerals (Prospecting and Mining) Act	Constitution; Labour Act and regulations	Constitution; Labour Act and regulations	Constitution; Env Man Act; Minerals (Prosp and Mining) Act
South Africa	Min & Petroleum Resources Devt Act; Mine Health and Safety Act	Min & Petroleum Res Devt Act but not on community	Mine Health and Safety Act	Mine Health and Safety Act	Mine Health and Safety Act; Min & Petroleum Res Devt Act
Swaziland	Environment Management Act; Mines & Min Act	Constitution; Mines and Minerals Act	Constitution; Employment Act; Mines and Mins Act; Occup Health & Safety Act	Constitution; Employment Act	Constitution; Environment Man Act; Mines & Min Act
Tanzania	Mining Act	Constitution; Mining Act	Constitution; Employment & Labour Relations Act; Work Comp Act (no OHS)	Employment & Labour Rel Act Mining Act	Constitution; Mining Act
Uganda	Constitution; Mining Act	Constitution; Mining Act & Regs	Constitution; Mining Act; Employment Act; Occ Safety and Health Act	Constitution	Constitution; Occ Safety & Health Act; Mining Act
Zambia	Constitution; Env Management Act; Mining and Min Act	Constitution	Constitution; Mines and Minerals Devt Act	Constitution; Mines and Min Devt Act; Public Hlth Act	Constitution; Env Management Act; Mining and Min Act
Zimbabwe	Env Management Act; Mines & Min Act	Constitution	Constitution; Labour Act; Pneumoconiosis Act	Constitution; Labour Act; Public Hlth Act	Constitution; Env Management Act;

Sources: See Table A1 Appendix 4 and list of national laws in the references.

Many laws make reference to making the findings of EIAs before issuing licenses available to local authorities (e.g. Democratic Republic of Congo (DRC) Mining Code Art 69), although some, such as Kenya's Mining Act, Sec 36, give power to the Cabinet Secretary to determine who should be informed or consulted, without explicitly referring to local community rights. The state sectors with powers of approval explicitly referred to in most laws are the mining and environment sectors, and while there is reference to 'all concerned government departments' in some (e.g. Kenya's Mining Act Sec 36), none explicitly refers to approvals by the health sector (although this may be a de facto practice in some).

There are relatively weak *specific* provisions for health and social protection relating to resettlement or relocation of affected communities due to mining activities. While there are constitutional duties in most EA countries to protect the family and freedom from arbitrary eviction, few ESA countries have laws that have specific provisions for this in relation to relocation due to mining, except in generic terms, where they require protection of the ‘interests of local communities’ and duties to ‘pay fair compensation for disturbance of rights or damage done’. Angola’s Mining Code Art 8 places a duty to avoid displacement of inhabitants and implement ventures that provide new jobs for workers; and Article 17 stipulates that where relocation is unavoidable it should ‘respect the habits, customs, traditions and other cultural aspects’ of affected communities, although it does not specify their economic activities. There are some obligations for consultation of local communities, such as Art 477 of DRC’s Mining regulations that obliges rights holders to ensure ‘informed participation’ of and ‘constructive dialogue’ with local communities, and Art 105 of Angola’s Mining Code provides for challenges by persons with direct interest, albeit with no specific grievance mechanism for displaced communities. It is possible that such provisions are contained in subsidiary regulations or guidance documents that were not available to us.

Mozambique’s Mining Law and Regulations for the Resettlement Process Resulting from Economic Activities have the most comprehensive provisions for resettled communities. The mining law places a duty on government to protect communities in areas of mining (Art 13); to ensure that they are fairly compensated if relocated through a formal agreement in consultation with and witnessed by a community representative (Art 30 and 32); that the compensation includes resettlement in dignified homes, support for development activities and issues such as food security; preservation of culture (Art 31), while the regulations detail more specific provisions for community representation, require that a mutually agreed resettlement plan be formally integrated within the EIA (Art 15) and amongst other duties, require that it include a health post (Art 16). Similar obligations to provide for and implement a resettlement plan are contained in Tanzania’s Mining Act Secs 41 and 47, as an obligation linked to holding a mining license.

All countries provide OHS protections in law for employed workers and contractors in the mining sector, although the more specific provisions are contained in regulations that we did not access. ESA laws generally provide for mine operators/employers to promote OHS in the workplace, to train for workplace hygiene health and safety, and to prevent and report accidents and injury. In all, there is general provision for powers of state inspectors, for suspension of mining activity in the event of serious risk to life and health of workers and the population (e.g., Angola Mining Code Art 53) and legal provision for workers compensation due to work-related injury or diseases. Tanzania’s Workers Compensation Act Sec 23 places a presumption that an occupational disease was due to their employment unless provided otherwise. Kenya’s Mining Act Sec 178 explicitly notes that those holding mineral rights shall not be exempted from OHS law. DRC’s Labour Code Art 73 provides that workers may rescind an employment contract that exposes them to serious and unforeseen health and safety risks. Mozambique’s Labour Law Art 54 further specifies a right for employees to ‘benefit from medical and medicinal aid’ and Uganda’s OHS Act requires periodic medical examinations (Sec 21), as do other ESA laws. South Africa’s Mine Health and Safety Act Sec 1 specifies a further intention to give effect to public international law obligations for health and safety on mines.

Health benefits for workers and families - such as for general healthcare cover, public health screening and insurance for non-work related injury – were less well covered in all ESA countries. Some countries (e.g., Kenya, South Africa, Malawi, Zimbabwe) place constitutional duties on the state to ensure access to healthcare, but the acts sourced do not oblige mine employers to provide *health* insurance (vs. accident insurance) or ensure financial/ geographical access to health services for workers and their families. When they do so directly, it is more as a result of sector worker-employer negotiations or a matter of voluntary CSR.

There is a duty in many ESA countries not to employ children and young persons in mining and quarrying operations (e.g., Lesotho Labour Code Art 127, which in Sec 132 also restricts female employment in underground work without written approval, in line with ILO Convention 45) and a general labour law duty to provide for maternity leave.

Mine owners are required to report and prevent epidemics. Under the Public Health Acts in many ESA countries, there is a duty to notify health officers if there is a case or death from notifiable disease, and while the obligation is then on the state to investigate, managers and owners of premises have a duty to prevent the spread of such diseases (e.g., Botswana Public Health Act Sec 14).

While most labour laws in ESA countries require medical screening for ‘fitness for work’ and occupational disease surveillance, Mozambique’s Labour Law Art 221 specifically includes screening for mental disorders that would affect employment. Owners of premises, which include workplaces, also have a duty under the same laws to cause or allow nuisances that would be ‘injurious or dangerous to health’ (Botswana Public Health Act Sec 43).

Environment, health and social protection for surrounding communities are better provided for, but largely under environment laws and largely for the protection of environments that may also benefit health. All ESA countries provide for healthy environments by constitution or law, with population rights, state and individual duties to ‘make rational use of natural resources’ and prevent environmental damage (e.g., Angola General Environmental Law Art’s 3,4,5). EIAs are a key feature of the measures to predict and prevent harm to the environment, as noted earlier, and the laws may include citizen rights to participation and information around their implementation and wider environmental measures, as discussed earlier. Angola’s Mining Code Art 8 specifically calls for national mining law to be harmonised with regional and international mining law in this respect, but goes further in Art 13 to oblige that mining zones do not disturb the integrated social and economic development of regions and populations. Art 53 provides for suspension of mining operations that cause serious risk to life and health of populations and harm to the environment.

Mozambique’s Regulations for the Resettlement Process Resulting from Economic Activities in Art 4 provides wider duties in setting principles of social equity, cohesion, responsibility and direct benefit for communities affected by mining activities; to re-establish or improve their living standards and incomes and to create social infrastructures for health, learning and sport and to ensure social services. Kenya’s Constitution, Art 70, allows for any person to apply for legal remedy to stop any act that violates the right to a clean and healthy environment, whether directly affected or not. Swaziland’s Environment Management Act Sec 58 has similar provisions, with Sec 51 providing for freedom for any person to request information relating to the environment that is relevant to its conservation. Similar provisions are found in other environment laws in the region. Zimbabwe’s Mines and Minerals Development Act Sec 87 extends this to redress in relation to damage not only to the environment, but also to ‘human and animal health or to socio-economic conditions’.

There are also provisions to fund these duties. Environment laws generally include a polluter pays principle, with liability for costs on the agent of the harm. Malawi’s Environment Management Act Sec 31 gives a general power to the state to determine what fiscal incentives shall apply for environmental protection. Angola’s Mining Code provides for a range of duties on mine operators to fund environmental restoration and contribute to an Environment Fund (Art 250 and Art 267). DRC’s Mining Code Art 79 further provides that relinquishing a mining right does not relieve the holders from meeting their environmental and community obligations. Kenya’s Mining Act (Sec 181) obliges mine licence applications to pay for an environmental protection bond as financial security for any environmental damage.

As shown in the summary in *Table 10 overleaf* and full legal provisions by country and thematic area in *Appendix 4 Table A2*, and beyond the constitutional public health duties to do no harm to health and environmental duties described earlier, there is almost no provision in ESA country laws for **health benefits for surrounding communities**. Zambia’s Mines and Minerals Development Act Sec 4 provides that mining shall be done in a way that promotes socioeconomic development, including ‘development of the local community in the surrounding area based on prioritisation of community needs, health and safety’.

Table 10: Health system indicators, ESA countries, post-2010

The table shows the Acts that include provisions relevant to the area in the column. The shading indicates how far the area is covered: the better covered the darker the shading

	Health benefits for surrounding communities	Fiscal contributions towards health and health services specifically in relation to EIs	Forward and backward links with local sectors and services supporting health; use of wealth funds, community ownership for local well-being	Post-mine closure obligations	General governance issues
Angola	-	Mining code	Mining code	Mining code	Gen Environ Law Mining code Commercial company law
Botswana	-	Mines and Minerals Act	Mines and Minerals Act	Mines and Minerals Act	Companies Act; Mines & Minerals Act-mainly on ownership
Democratic Republic of Congo	-	Mining code *	Mining code	Mining code	Constitution; Labour and Mining codes and regs
Kenya	Constitution; Env Management and Coord Act; Mining Act	Env Management and Coord Act; Mining Act	Constitution; Mining Act	Mining Act	Constitution; Env Management and Coord Act; Mining Act
Lesotho		Mines and Minerals Act	Mines and Minerals Act	Mines & Minerals Act; Mine Safety Act	Environment Act; Mines & Minerals Act; Labour Code
Madagascar	-	Large-scale Investments in the Malagasy Mining Sector Law	Large-scale Investments in the Malagasy Mining Sector Law; Mining code	Environmental Protection Reg;	Constitution Mining Code
Malawi	-	Environment Man Act; Mines & Minerals Act	Constitution; Mines & Minerals Act; Env Management Act;	Mines and Minerals Act	Constitution; Mines & Min Act; Environment Man Act
Mauritius	No extractive mining/ industry sector				
Mozambique	-	Fiscal benefit code; Mining law	Fiscal benefit code; Mining law; Regs for the Resettlement Process	Mining Law	Labour Law; Mining Law; Regs for the Resettlement Process
Namibia	-	Minerals (Prosp and Mining) Act; Environ Inv Fund of Namibia Act	Environmental Management Act Minerals (Prosp and Mining) Act	Minerals (Prosp and Mining) Act	Constitution; Labour Act; Env Management Act; Minerals (Prosp and Mining) Act
South Africa	-	Min & Petroleum Resources Devt Act; Mn & Petroleum Res Royalty Act	Min & Petroleum Resources Devt Act; Mines and Mineral Act	Min & Petroleum Resources Devt Act	Mine Health and Safety Act; Min & Petroleum Res Devt Act

Table 10: Health system indicators, ESA countries, post-2010, continued

The table shows the Acts that include provisions relevant to the area in the column. The shading indicates how far the area is covered: the better covered the darker the shading

	Health benefits for surrounding communities	Fiscal contributions towards health and health services specifically in relation to EIs	Forward and backward links with local sectors and services supporting health; use of wealth funds, community ownership for local well-being	Post-mine closure obligations	General governance issues
Swaziland	Constitution	Mines and Minerals Act	Constitution; Employment Act Mines and Mins Act	Mines and Minerals Act	Constitution; Environmental Man Act; Mines and Mins Act
Tanzania	-	Tanzania Extractive Industries (Transparency and Accountability) Act	Mining Act	Mining Act	Constitution; Mining Act; Tanzania Extractive Industries (Transp and Accountability) Act
Uganda	Constitution	Constitution; Mining Act	Constitution; Mining Act	Mining Act	Constitution; Mining Act
Zambia	Mines and Min Devt Act	Constitution; Mines and Min Devt Act	Constitution; Zambia Devt Agency Act; Mines & Min Devt Act	Constitution; Mines & Min Devt Act	Constitution; Zam Devt Ag Act; Mines & Min Devt Act; Env Man Act
Zimbabwe	-	Constitution; Env Man Act; Mines and Min Act	Constitution; Indigenisation and Econ Emp Act & Regs; Min Marketing Corp Act	Env Man Act; Mines and Min Act	Constitution; Env Man Act; Mines and Min Act Labour Act; Min Marketing Corp Act

Sources: See Table A1 Appendix 4 and list of national laws in the references.

(*) No online law found in the search with provision for the tax levy referred to in the literature.

The legal provisions for **fiscal contributions towards health and health services** largely relate to taxes and royalties (taxes on mineral resources) set as principles in law, and the laws also provide for incentives for various areas of contribution to national development. Table 11 outlines what these are by country. Swaziland's Mines and Minerals Act Sec 78 provides for payment of fiscal contributions to a trust for 'benefit of the nation' with additional obligation of 25% state participation in shareholding without a fee. In addition, Angola's Mining Code Art 245 provides for municipalities in mine areas to benefit directly from a share of the taxes (specific portion not stated) while DRCs Mining Code Art 242 specifies the distribution shares in law (60% central; 25% provincial and 15% local), as does Kenya's Mining Act (70% central; 20% county; 10% local). Mozambique's Mining Code Article 20 requires an unspecified percent of revenue from mining activities to be applied for development activities in the areas where mining takes place, while other countries (such as Angola, Kenya, Namibia) allow for government to vary tax/royalty levels based on contribution to various dimensions of national development activities.

There is limited definition of how these fiscal contributions or incentives are reported on. The Tanzania Extractive Industries (Transparency and Accountability) Act in Sections 10-15 provide the most specific clauses on verification and public accounting for these funds, and in Sec 15 require EIs to 'submit annual reports and information on local content, corporate social responsibility and capital expenditures'. Zimbabwe's Environmental Management Act Sec 50 allows for an environment levy on activities that impact on environment while the National AIDS Trust Fund Act applies a surtax levy to fund HIV interventions (with an exemption for the mining sector lifted in 2014).

Table 11: Legal provisions for fiscal contributions

	Fiscal contributions provided for in law
Angola	Income tax; royalty tax on value of mineral resources; surface tax; small-scale mining tax Incentives: for contribution to development in remote areas; use of local markets; contribution to training and to major increases in exports
Botswana	Royalties as share of gross market value; annual license charges; income tax Incentives: Government may defer royalty payments for any period
DRC	Royalties; income tax Incentives: Preferential rates for import duties, exemption on export duties
Kenya	State acquisition of 10% free interest in share capital; fees, annual charges; royalties; Incentives: tax and other fiscal incentives for environment management; discretionary reduction in royalties
Lesotho	Fees, charges, rent, royalties; income tax Incentives: royalties may defer royalty payment
Madagascar	Income tax; mining tax on 2% market values Incentives: capping of expatriate income tax; deferred income tax for first 5 years
Malawi	Royalties; annual charges; income tax Incentives: to be set by government
Mozambique	Income tax; VAT; surface tax; production tax; municipal tax Incentives: investment in training tax deductible; investments over \$500 million receive import duty, income tax; property transfer tax exemptions; custom duty and VAT exemptions
Namibia	Royalties; income tax Incentives: State may vary royalty based on contribution to training, employment, use of local services, other development benefit
South Africa	Royalties; income tax
Swaziland	Royalties; tax, fees paid to a trust for benefit of the nation; 25% trust shareholding without cost Incentives: trust may reduce or suspend royalty contributions
Tanzania	Royalties; annual charges
Uganda	Royalties; income tax Incentives: State may remit royalties 'in the interest of production of a mineral'
Zambia	Royalties; income tax Incentives: State may waive royalties 'in the interest of production of a mineral'
Zimbabwe	Royalties; income tax; environmental levy; AIDS levy; Incentives: President may remit/waive / exempt royalties as deemed expedient

Sources: See Table A1 Appendix 4 and list of national laws in the references.

Mauritius excluded as no EI mining sector; DRC = Democratic Republic of Congo

(*) No online law found in the search with provision for the tax levy for health referred to in the literature.

As noted in earlier discussions, there are conditions on acquiring mining rights and fiscal and other incentives to **stimulate forward and backward links with local sectors and services supporting health**, although this area is generally not well covered in law in many ESA countries, and particularly in relation to investments in health or health services. Most ESA countries include preferences for employment of local citizens and use of local goods and services and require training programmes.

Article 8 of Angola's Mining Code sets areas of socioeconomic development as strategic goals rather than duties, while Kenya's Mining Act provides 'where feasible' for socially responsible investment for the local communities' within a 'community development agreement' (Sec 47). Mozambique in Art 20 of its Mining Law targets an (unspecified) percentage of state revenue from mining for development of the local community. South Africa's Mineral and Petroleum Resources Development Act Sec 2 specifically refers to objects to expand benefits and economic opportunities from mining for historically disadvantaged people, including in terms of social welfare and socioeconomic development in the areas where mines are operating and community rights to mine (Sec 104).

As noted earlier Zambia's Mines and Minerals Development Act specifically requires undertakings for development of local communities and management of environments for the award of a license (Secs 4 and 32). Zimbabwe's Indigenisation and Economic Empowerment Act and Regulations further seek to secure 51% of share ownership by 'indigenous Zimbabweans', with assignment of a quota for 'the undertaking of specified development work in the community' the business operates in. (It does not make specific reference to health developments but these may be included).

Most ESA country laws include provisions for **post-mine closure obligations**, with Angola's Mining Code (Arts 2, 71, 75, 115 and 116) setting comprehensive provisions for including post-closure plans in pre-mining EIAs, and continuing duties post closure for fiscal, environment and other legal obligations. There is a focus in ESA laws on environmental reclamation and for ensuring safety of the area (as in Tanzania's Mining Act (Sec 62); but no specific provisions for handover of welfare services or associated infrastructures, for relocation back of affected populations, or any other social or health aspects. Despite some occupational lung diseases taking years to emerge, there is no specific reference to or fiscal provision for managing such longer-term health consequences as part of the requirements for termination.

Finally, in relation to **general governance** of these issues, the constitutions in most ESA countries provide for general rights of information, association, assembly and participation that apply in EIs, while company law requires registration and certain obligations on reporting by companies. OHS and labour laws generally provide for joint consultation mechanisms for workers and managers on workplace safety and employment matters, respectively.

As noted earlier, the newer environmental laws in the region include more detailed provisions on duties to disclose and public rights to information and consultation on EIAs and environmental matters, which may have health implications. Some laws provide more specifically for EI governance arrangements. DRCs Mining Regulations place a duty on mine owners to "ensure the informed participation of the affected local communities and to remain in constructive dialogue with them" (Art 477); as does Mozambique's Mining Law, with further provisions in Art 32 for community consultation prior to the granting of a license and a duty on government to create mechanisms and community capabilities for engagement with communities. Kenya's Mining Act (Sec 220) prohibits public officers from acquiring mining rights or interests to protect against conflict of interest in decision making.

Tanzania's Extractive Industries (Transparency and Accountability) Act provides the most detailed provisions for transparency and accountability, establishing an independent oversight committee for this (Sec 4), including civil society (Sec 5), with reporting and disclosure obligations on EIs and measures for public accountability, public reporting and citizen awareness (Secs 10 and 16), including all past and current mineral development agreements (Sec 27).

6.2 Coverage of and gaps in EI duties and health protection in ESA laws

Generally the laws in ESA countries cover well occupational health and safety for workers in EIs and environmental protection, with the latter in more recent law providing more comprehensive provisions for information, disclosure, consultation and liability to remedy damages than older public health laws do. There is variation in these laws, including in their definitions or coverage of specific groups or benefits.

Health benefits, apart from prevention of nuisances or epidemic risks, are not well covered for wider communities, nor are health and social rights of communities resettled due to mining operations, or health and social obligations post-mine closure.

Many countries have laws covering environmental impact assessment prior to awarding of licenses, but few make specific reference to health and social impacts assessment, plans for remedying these or inclusion of health sectors in approval of plans. Laws and regulations regarding mine closure almost exclusively focus on the environment and safety.

Not all ESA countries make specific provisions for inclusion of community representatives in any of these areas. Integrating health and community voice is an area that is important to remedy, both by updating public health law and by including health and social impacts in EIAs provided for in mining law, to avoid multiple processes and to ensure synergy across these key areas of development impact. There is also no explicit duty on the state to assess the cumulative impacts of EI projects across a wider area.

Fiscal contributions are the major means for EIs to contribute to these wider health benefits and services. While ESA laws make specific reference to using these contributions for stimulating local employment, training and skills transfer and use of local goods and services, there is limited reference to their use for health and social welfare, which are generally identified as areas of CSR.

There is some reference to forward and backward linkages in relation to local employment and services but no specific provisions on areas that may have specific relevance to health, such as promotion of local food production through procurement policies or ensuring that transport systems support local markets. Further, while some laws do provide for a share of revenues to be used locally, there is some ambiguity on who plays a role in deciding on use of these funds. Only Tanzania has a law that is explicit on transparency and public accountability on EI resources.

It was not possible to find the law for DRCs introduction of a micro-levy on EIs in September 2014 of \$0.10 on every barrel of oil sold by state, with the funds used to fight chronic malnutrition (Innovative Finance Foundation, 2014). Only one country provides a specific duty on EIs to contribute to health services in their area and there is no duty for comprehensive insurance coverage of workers or their families. Few laws provide for pooling of funds for financial security against risk or harm, as is the case in Kenya's environment fund or Zimbabwe's AIDS Levy Fund. Further most ESA laws provide for exemptions for EIs from fiscal contributions for various development contributions, at discretion of the state.

While the literature suggested that countries with older EI sectors may have more developed laws, in fact some of the more comprehensive provisions come from newer laws passed in countries with more recent EI activities, such as Mozambique and Tanzania, where the laws have integrated new legal developments.

While there were gaps, in fact there were also many legal provisions that do provide potential for health rights to be advanced in EIs, albeit scattered across countries. Some laws were very comprehensive on specific areas. It raises a question of how far the laws are being implemented. While not a focus of this research and a matter for follow-up research, the next section briefly discusses the implementation issues.



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7. IMPLEMENTING LAWS AND STANDARDS FOR EIS

The literature review highlighted a range of documented constraints in and proposals made for improvement of EI duties and CSR in ESA countries.

Contract negotiations are reported to be “extremely asymmetrical, where the TNC is highly resourced and skilled and the state poorly” (AU, 2009:21). The African Development Bank was thus reported in 2009 to be establishing a capacity to provide legal advice to member states in these contract negotiations (AU, 2009). The fall in metal prices in mid-2008 meant that many law reform and contract renegotiation processes stalled or were reversed, such as in Zambia, Tanzania, South Africa and the DRC (Lambrechts et al., 2009). The fall in prices weakened the negotiating capacity of African governments, making it a ‘buyer’s market’ (Lambrechts et al., 2009; Lungu, 2008). As a result in Zambia, one EI, First Quantum, openly challenged new 2008 tax laws, while another in Tanzania, Canadian Barrick Gold (with support of the Canadian government) challenged the tax proposals of a government appointed commission tasked with review of Tanzania’s mining regime. With the fall in mineral prices, the World Bank was reported to have generally promoted a shift to lower taxes on mining companies in its client countries in Africa (Lambrechts et al., 2009).

In relation to health concerns, WHO (2011) notes that these are often a trigger for claims against EIs, but are not often the basis for corrective action, given difficulties in establishing the burden of proof in relation to health and environment and the lack of uniform interpretation and application of requirements for health. Countries seeking to negotiate health standards and benefits are thus argued to need to identify relevant health issues; provide evidence of causality between environmental issues and health; provide standards on identifying and addressing these issues and provide evidence from health impact assessments (WHO, 2011).

There is, however, some question on whether ESA governments have the capacity or will to pursue lengthy processes of regulation and enforcement that are heavily opposed by the EIs themselves (Kabemba, 2014; Bryan and Hofmann, 2007). The AU (2009) notes that weak governance, lack of effective appropriate institutions and a desire to set investor friendly outcomes impacts on the state’s ability to ensure an equitable share of the rents, particularly windfall rents.

Agreements may be negotiated directly by executives to countervail EI power. In Angola, for example, President dos Santos was directly involved in contract negotiations with oil companies (Bryan and Hofmann, 2007). While Kenya’s law specifically prohibited public servants involved in decisions on mining having direct or indirect interests in mining, weak accountability mechanisms governing the behaviour of senior officials involved in or responsible for these areas, lack of strong oversight of EIs and loopholes in national and international law governing corporate and financial activity weakens effective regulation of EI practices (Mailey, 2015).

This has led to some distrust by civil society that political executives prioritise the interests of their citizens over EIs (Ujamaa Centre and ILEG, 2010), with agreements seen to be negotiated with elites in ESA countries who may not always represent wider community interests (Shelton and Kabemba, 2012). At the same time, civil society is also weak in many ESA countries and communities are not empowered to make their voices heard (Kabemba, 2014). Community responses may also be discouraged by criminalisation of protests against mining (Bambas-Nolen et al., 2013).

The challenges to and determinants of weak implementation of regulation were beyond the scope of this work and merits follow-up investigation. This includes power imbalances between EIs and local actors. In addition, governments of source countries may actively support and intervene on behalf of their companies, given their often-significant economic power vis-à-vis African countries (Shelton and Kabemba, 2012:119; Lambrechts et al., 2009; Bambas-Nolen et al., 2013).

Implementation may also be constrained by the fact that the legal standards noted in *Appendix 4* are not well known and are contained in multiple and sometimes fragmented laws. This poses a challenge for enforcement. Communities may face specific difficulties in knowing and applying even the rights that do exist, such as for compensation in resettlement processes or rehabilitation of community environments once a mine closes (GEF, OSISA and UNDP, 2013; Aaboe and Kring, 2013). While the tax law is clear, the implementation may not be, with laws and agreements not all in the public domain, and exemptions granted not taken through parliament (Lambrechts et al., 2009: ix).

Beyond these constraints there are further factors weakening implementation. As Shelton and Kabemba (2012:197) explicitly note from studies in Angola, DRC, Mozambique, South Africa, Zambia, Zimbabwe: “Legislative and policy shortcomings are... not the most important constraint... the most serious problem is the gap between what the law or policy says should happen and what does happen”. In relation to national standards these factors include:

- The economic influence and perceived direct benefit of EIs to public revenues and to the economy, which weaken motivations for enforcement (von der Goltz and Barnwal 2014; SARW and EITI, 2012).
- Lack of clear policy frameworks, fragmented laws and lack of transparency on contracts (Ujamaa Centre and ILEG, 2010), lack of information on capital and revenue flows, and confidentiality clauses in contracts limiting disclosure of information (Murombo, 2013; Kabembe and Nhancale, 2012).
- Institutional conflict and overlaps hindering effective implementation and monitoring of regulations. For example, in South Africa the Department of Mineral Resources issues mining licenses without the knowledge of the Department of Environmental Affairs (GEF, OSISA and UNDP, 2013).
- Various informal (and illegal) practices circumnavigating legal provisions, such as in the smuggling of tanzanite from Tanzania (De Backer, 2012).

Capacity deficits in the state, civil society, parliament and local community further weaken enforcement of laws, including in relation to qualified staff; infrastructure; information; technology and financial resources (Kabemba, 2014; HRW, 2011; Aaboe and Kring, 2013). The fines imposed are reported in many cases to be so low that they have almost no deterrent effect, further discouraging enforcement (HRW, 2011).

While the EITI aims to address some of these gaps, and the Tanzania law cited earlier provides significant provisions for information and accountability, there is a perception by some African heads of state that international codes like the EITI appear to position them as corrupt, and a sense that they already have adequate management, control and audit systems in place, discouraging implementation of this instrument (Besada and Martin, 2013; SARW and EITI, 2012).

Providing regional guidance is important to locate this issue within a regional policy lens. Further, drawing on developments in national laws within the region locates global standards within national experience in protecting health within the competing interests around EIs. At the same time, given our findings of many positive legal provisions and the discussion in this section of implementation gaps, it would be important to explore further and act on the factors affecting the implementation and oversight of regulation.

8. RECOMMENDATIONS FOR REGIONAL GUIDANCE



As noted in the literature review, there is scope for regional guidance on health in EIs, and already stated intention in West Africa to harmonise and set regional standards on EIs. SADC also already has a Protocol on Mining 1997 and an intention to harmonise mining policies, standards and laws in southern Africa, including in terms of health, safety and environment (AU, 2009; Murombo, 2013).

While no single law in ESA countries addresses all aspects of international guidance on protection and health and social welfare in EIs, in combination the laws in ESA countries provide clauses that could form the basis of such regional guidance. Drawing guidance from laws from *within* the region suggests their feasibility for all countries.

The suggested clauses for regional guidance (and the laws they derive from) are shown below, within the key areas of health protection provided for in international guidance.

1. **Protection of health-related issues in negotiation of prospecting rights/licenses and EI agreements** implies legal provision of:

- Approval of a mining right subject to ensuring that mining activity prevents any adverse harm to human health¹. Mining rights holders' duty to promote public health and security in accordance with national and international applicable legislation².
- Implementation and approval by relevant government departments, including environment and health departments³, of environmental, social and health impact assessments (ESHIA) that consider: environment, social and health impact of the specific EI project as a pre-condition for granting and obtaining mining rights⁴.
- ESHIA submitted for approval of mining rights' applications to include costed impact prevention/mitigation; post-mining rehabilitation plans; evidence of ability to comply with health and safety law⁵; socially responsible investments for the local community⁶; benefit to and measures for engaging local communities; resettlement plans (where relevant); monitoring and audits and grievance and dispute settlement mechanisms⁷.
- Local authorities and local communities to be informed about the ESHIA and consulted on the impacts and any measures to be taken that may affect them, or the area in which they live, before EI approval, with ESHIA reporting on these consultations and their recommendations⁸.
- The state to implement wider ESHIA that plan for the cumulative impacts of EI projects across a wider area and to set periods for updated ESHIA for licensing renewal.

1 Zambia Mines and Minerals Act Section 80

2 Mozambique's Mining Law Art 36

3 Kenya's Mining Act Sec 36, (health further specified in the guidance proposal)

4 Most laws in the region provide for this. The guidance explicitly integrates health within environment and social impact assessments as recommended in International Council on Mining and Metals (ICMM) Good Practice Guidance on Health Impact Assessment, 2010, and International Finance Corporation (IFC) Performance Standards, 2012

5 South Africa's Mine Health and Safety Act Sec 23

6 As in Kenya's Mining Act Sec 101 and Mozambique's Mining Law Art 8

7 Angola Mining Code Art 66 and and Mozambique's Mining Law Art 8

8 DRC Mining Code Art 69

2. **Health and social protection relating to resettlement or relocation of affected communities** due to mining activities calls for legal provision of:
 - Government to protect communities in areas of mining⁹.
 - No forced eviction, avoidance of displacement of inhabitants¹⁰.
 - When avoidance of displacement is not possible, displacement minimized by exploring alternative project designs and a duty for companies to pay the affected communities a fair and transparent compensation fixed in a memorandum between the government, the company and the community as a requirement for the allocation of mining exploration rights¹¹, with resettlement plans included in the EHSIA, as above.
 - Fair compensation to cover: resettlement in dignified homes and in better conditions than previous; preservation of historical, cultural and symbolic heritage of families and communities; socioeconomic activities to re-establish or improve their living standards and incomes and social infrastructures for health, learning, sport in ways to be agreed¹².
 - EI duty to ensure informed participation of, constructive dialogue with and fair management of grievances from local communities at all stages in a resettlement process¹³.

3. **OHS protections for employed workers and contractors in the mining sector**, to include:
 - The promotion and protection of occupational health and safety for workers and contractors; EI duties of training in workplace health and safety; prevention and reporting of accidents and injury; provision of periodic medical examinations, with no exemption from these duties for those holding mineral rights¹⁴.
 - Legal objects to give effect to public international law obligations for OHS on mines¹⁵.
 - EI duty to make available to workers representatives, competent authorities, workers' and employers' organisations and upon request information on the safety and health standards relevant to their local operations, those observed in other countries, and relevant special hazards and protective measures¹⁶.
 - Powers of state inspectors, including to suspend mining activity in the event of serious risk to life and health of workers and the population¹⁷.
 - Provision for workers compensation for work-related injury or disease, and a presumption that an occupational disease was due to employment unless proved otherwise¹⁸.
 - Provision for workers to rescind an employment contract that exposes them to serious and unforeseen health and safety risks¹⁹.

9 Mozambique's Mining law Art 13

10 Angola's Mining Code Art 8 and as set in International Finance Corporation (IFC) Performance Standards 2012

11 Mozambique Mining Law Art 30

12 Mozambique Regulations for the Resettlement Process Resulting from Economic Activities

13 DRCs Mining Regulations Art 477

14 Kenya's Mining Act Sec 178 and as set in ILO Safety and Health in Mines Convention

15 South Africa's Mine Health and Safety Act Sec 1

16 ILO Tripartite declaration of principles concerning multinational enterprises and social policy (MNE Declaration)

17 Angola Mining Code Art 53

18 Tanzania's Workers Compensation Act Sec 23

19 DRC's Labour Code Art 73

4. **Health benefits for workers, families and surrounding communities to include:**
 - EI duties to environments for health (see next section) and access to medical care.
 - EI owners to avoid harm to health, to prevent nuisances that would be ‘injurious or dangerous to health’; to report and prevent the spread of infectious and notifiable diseases; to avoid or minimize the risks and impacts to community health, safety, and security that may arise from project-related activities, with particular attention to vulnerable groups²⁰.
 - Mining to be done in a way that promotes socioeconomic development, including the local community in the surrounding area based on prioritisation of community needs, health and safety²¹.
 - Prohibition of employment of children and young persons in mining and quarrying.
 - Safe and healthy working conditions for migrant workers, workers engaged by third parties and workers in the client’s supply chain²².
 - EIs to make fiscal (and insurance) contributions to ensure access to health services for workers and their families.

5. **Environment, health and social protection for surrounding communities to include:**
 - Citizens’ right to live in a healthy environment and benefit from rational use of natural resources. Activities with immediate or long-term effects on the environment to be analysed in advance, to eliminate or minimize negative effects and to support environmental conservation and protection and rational use of natural resources²³.
 - EI duties to implement ESHIAs (see above).
 - Mining zones and operations to not disturb the integrated social and economic development of regions and populations, with state power to suspend mining operations that cause serious risk to life and health of populations and harm to the environment²⁴.
 - Any person to apply for legal remedy to stop any act that violates the right to a clean and healthy environment, whether they are directly affected or not²⁵. Freedom for any person to request information relating to the environment that is relevant to its conservation²⁶.
 - All persons or organisations whose actions cause harm to the environment, or the degradation, destruction or depletion of national resources to be held liable for the same and be required to repair such damage and/or pay compensation for damage caused²⁷.
 - Redress from those who cause damage to the environment and to human and animal health²⁸. Contribution from mine license holders to an environmental protection bond, fund or other forms of financial security for any environmental damage²⁹.
 - Relinquishing a mining right to not relieve the holders from meeting their environmental and community obligations³⁰.

6. **Fiscal contributions towards health and health services to include:**
 - Communities and local authorities in mine areas to benefit directly from a share of EI fiscal contributions, with at least 10% to local communities³¹.

20 Botswana Public Health Act Sec 14, and 43 and IFC Performance Standards 2012

21 Zambia’s Mines and Minerals Development Act Sec 4

22 Lesotho Labour Code Arts 127, 132, ILO Convention 45 and IFC Performance Standards 2012

23 Angola’s General Environmental Law Arts 3-4

24 Angola’s Mining Code Art 13, 53

25 Kenya’s Constitution, Art 70

26 Swaziland’s Environment Management Act Sec 51

27 Angola’s General Environmental Law Arts 3-4

28 Zimbabwe’s Mines and Minerals Development Act Sec 87

29 Kenya’s Mining Act Sec 181

30 DRC’s Mining Code Art 79

31 Angola’s Mining Code Art 245, DRCs Mining Code Art 242; Kenya’s Mining Act; Mozambique’s Mining Code Article 20

- EIs to refrain from seeking or accepting exemptions not contemplated in the statutory or regulatory framework related to environmental, health, safety, labour, taxation, financial incentives or other issues.
- State authorities to apply levies to EI activities that impact on environment, health and social welfare or to contribute towards national funds for public health³².
- EIs to submit annual reports and information on local content, corporate social responsibility and capital expenditures³³.

7. **Stimulation of forward and backward links with local sectors and services supporting health,** including:

- Provisions for employment of local citizens; use of local goods and services; training programmes and skills transfer.
- EI contribution to economic, social and environmental progress and socially responsible investment for the local communities, within community development agreements, share ownership arrangements, particularly for historically disadvantaged people³⁴.

8. **Post mine closure obligations,** including

- EI duty to provide post-closure plans in ESHIAs before mining rights approval.
- Continuing EI duties post closure for fiscal, environment and other legal obligations, including in relation to screening, care services and compensation for chronic occupational diseases³⁵.
- Ensuring environmental reclamation, public health and safety of the area³⁶, with measures for handover of welfare services and social infrastructures or other social or health aspects in consultation with affected communities.

9. In relation to **governance** of these issues, inclusion in law of:

- Respect for rights to information, association, assembly and participation.
- EI support and upholding of good corporate governance principles and development and application of good corporate governance practices that foster a relationship of confidence and mutual trust between enterprises and the societies in which they operate³⁷.
- EI compliance with legal provisions for registration and reporting, joint consultation and co-determination between workers and managers on workplace safety and employment, disclosure and public information and consultation on ESHIAs.
- EI owner duty to ensure the informed participation of the affected local communities and to remain in constructive dialogue with them, community consultation *prior* to the granting of a license/right and a duty on government to create mechanisms and community capabilities for such engagement³⁸
- Provisions for transparency and accountability, for an independent oversight committee that includes civil society, with reporting and disclosure obligations on EIs and measures for public accountability, public reporting and citizen awareness, including of all past and current mineral development agreements³⁹.
- Prohibition of public officers acquiring mining rights or interests to protect against conflict of interest in decision making⁴⁰.

32 Such as in Zimbabwe's Environmental Management Act Sec 50 and National AIDS Trust Fund Act

33 Tanzania Extractive Industries (Transparency and Accountability Act) Sections 10-15

34 Kenya's Mining Act Sec 47; South Africa's Mineral and Petroleum Resources Development Act Sec 2, Zimbabwe's Indigenisation and Economic Empowerment Act and and OECD Guidelines for Multinational Enterprises

35 Angola's Mining Code Arts 2, 71,75, 115 and 116

36 Tanzania's Mining Act Sec 62

37 OECD Guidelines for Multinational Enterprises

38 DRCs Mining Regulations Art 477, Mozambique's Mining Law Art 32

39 Tanzania's Extractive Industries (Transparency and Accountability Act)

40 Kenya's Mining Act Sec 220

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Series Editor: Rene Loewenson

Issue Editor: V Knight

DTP: Blue Apple Projects

ISBN: 978-0-7974-7642-4

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