What is Social Impact Assessment?

HIGHLIGHTS

- SIA is used to identify and manage the social impacts of extractive industry projects. The aim is to enhance positive benefits as well as to mitigate negative effects.

- Good practice is to integrate environmental and social assessments. Other types of assessment, such as cultural, health and human rights impact assessments may also be employed.

- Community engagement and social assessment should start as early as possible in the planning phases of a development, and can address people's expectations, anxieties and the causes of social tension.

- An SIA provides an essential foundation for project-related social management plans, community agreements, and processes of free, prior and informed consent (FPIC).

- Meaningful community engagement is central to the implementation of an SIA and to the ongoing management of social issues throughout the project life cycle.

Social impact assessment (SIA) is the process of identifying and managing the social impacts of industrial projects. It can also be applied to policies, plans and programmes. SIA is used to predict and mitigate negative impacts and identify opportunities to enhance benefits for local communities and broader society. Central to the principles and practice of SIA is the involvement of affected communities and other stakeholders in the process. SIA should inform decision-making by government and companies from the early stages of a project. Equally important is the role of SIA in the ongoing management of social issues throughout the whole project cycle until decommissioning and closure. As such, the social management plan that derives from an SIA is extremely important. SIA is also an essential foundation for community agreements and in processes of free, prior and informed consent (FPIC) conducted with indigenous communities before the start of industrial development projects. This briefing explores the core principles of SIA and the SIA requirements of selected international instruments. It also considers some of the key challenges to implementing SIA in practice and offers some recommendations for future practice.

Why is SIA important for indigenous peoples and the extractive industries?

SIA is an important tool to assess the social, economic and cultural impacts of industrial activities on indigenous communities. This is particularly relevant for the extractive industries, whose activities frequently encroach on the lands and waters that indigenous peoples depend on for their traditional livelihood activities. An SIA identifies potential impacts on indigenous titled lands and territories of customary resource use. As such, it helps to avoid potential negative impacts on critical natural resources, such as water and forests, as well as impacts on cultural resources, such as sacred sites. An SIA process also helps to identify ways that indigenous communities could benefit from a proposed development, for example, through infrastructure development, job creation or support for traditional enterprise, and should enable residents of that community to shape the way the development moves forward.

SIAs are considered to be international good practice for managing the social impacts of extractive industry projects, and are required by international financial institutions and corporate policies, often in the form of an integrated environmental and social impact assessment or ESIA. These are then translated into management plans for implementation throughout the life of the project.

The process of giving or withholding free, prior and informed consent (FPIC) and the negotiation of community agreements require accurate information about potential social impacts and benefits of a project. An SIA is therefore an essential foundation for these other processes.

Which international instruments require SIA?

The formal requirement for SIA originally arose out of the **US National Environmental Policy Act (NEPA) (1969)**, which required environmental impact statements for projects, policies, plans, and programmes, incorporating a social element to the studies and requiring public engagement (Burge and Robertson, 1990). The practices of environmental impact assessment (EIA) and SIA have both evolved over the years and have been adopted globally.

EIA has since become a legal requirement in many countries, incorporating elements of SIA to a greater or lesser extent (McCullough, 2016). In Canada, for instance, social issues are generally incorporated into an EIA rather than carrying out a distinct SIA (Papillon and Rodon, 2017). In Norway, SIA is not a mandatory requirement, but is sometimes carried out alongside an EIA, particularly in cases where indigenous peoples' issues are especially prominent (Ibenholt *et al.*, 2016). In Greenland, SIAs are a legal requirement of oil or mining companies in the planning and exploration phases of development (Hansen *et al.*, 2016). In Russia, a distinct form of ethno-cultural impact assessment has been developed specifically for assessing the impacts of industrial projects on indigenous communities – the anthropological expert review (*etnologicheskaya ekspertiza*). This is written into national and regional legislation, but is only a legal obligation in one region of the Russian Federation – the Republic of Sakha (Yakutia) (Novikova and Wilson, 2017).[1]

National legislation is not only inconsistent between countries; it also frequently fails to provide detailed guidance on the requirements for SIA. In response to this and to the particular requirements of certain constituencies, and in the light of industrial development trends, international standards have evolved to provide protection especially for vulnerable ecosystems and communities. Table 1 summarises the SIA requirements in seven selected international instruments that influence extractive industry practice in relation to indigenous peoples.

The **OECD Declaration on International Investment and Multinational Enterprises (1976, last reviewed in 2011)** is a policy commitment by all 35 OECD countries and 11 non-OECD countries that have subscribed to the Declaration. A cornerstone of the Declaration is the commitment to promote adherence to the **OECD Guidelines for Multinational Enterprises (1976, last revised in 2011)**, which include guidance relating to due diligence and environmental impact assessment, focusing on environment, health and safety. The latest (2011) version of the Guidelines incorporates a section on human rights, and states that enterprises should 'carry out human rights due diligence as appropriate to their size, the nature and context of operations, and the severity of the risks of adverse human rights impacts' (Chapter IV, recommendation 5). The OECD has also produced detailed guidance on meaningful stakeholder consultation (OECD, 2016).

The **International Labour Organisation (ILO) Convention 169 on Indigenous and Tribal Peoples (1989)** places the obligation on its 22 signatory governments to 'ensure that, whenever appropriate, studies are carried out, in co-operation with the peoples concerned, to assess the social, spiritual, cultural and environmental impact on them of planned development activities' (Article 7(3). These studies are expected to provide the foundation for the way that the project is subsequently developed.

Article 14 (1a) of the **Convention on Biological Diversity (CBD) (1992)** has a requirement for each contracting party (i.e. the 149 states that have ratified the CBD) to:

> Introduce appropriate procedures requiring environmental impact assessment of its proposed projects that are likely to have significant adverse effects on biological diversity, with a view to avoiding or minimising such effects and, where appropriate, allow for public participation in such procedures.

The **Akwé: Kon Guidelines (2004)**[2] were developed by the Secretariat of the CBD in order to provide guidance for proponents of developments that are likely to affect sacred sites, land and water bodies that are traditionally used or occupied by indigenous and local communities. The Guidelines provide detailed guidance on conducting environmental, social and cultural assessments (see below).

	TABLE 1. Summary of SIA requirements in selected international instruments
Instrument	**SIA requirements**
OECD Guidelines on Multinational Enterprises (2011)	Enterprises should '[c]arry out human rights due diligence as appropriate to their size, the nature and context of operations, and the severity of the risks of adverse human rights impacts' (**Ch.IV(5)**); and '[a]ssess, and address in decision-making, the foreseeable environmental, health, and safety-related impacts associated with the processes, goods and services of the enterprise over their full life cycle with a view to avoiding or, when unavoidable, mitigating them. Where these proposed activities may have significant environmental, health, or safety impacts, and where they are subject to a decision of a competent authority, prepare an appropriate environmental impact assessment' (**Ch.VI (3)**).
ILO Convention No.169 on Indigenous and Tribal Peoples (ILO 169) (1989)	According to **Article 7(3)** '[g]overnments shall ensure that, whenever appropriate, studies are carried out, in co-operation with the peoples concerned, to assess the social, spiritual, cultural and environmental impact on them of planned development activities. The results of these studies shall be considered as fundamental criteria for the implementation of these activities'.
Convention on Biological Diversity (CBD) (1992)	According to **Article 14(1a)**, a state is obliged to 'introduce appropriate procedures requiring environmental impact assessment of its proposed projects that are likely to have significant adverse effects on biological diversity, with a view to avoiding or minimising such effects and, where appropriate, allow for public participation in such procedures'.
International Finance Corporation (IFC) Environmental and Social Performance Standards (2012)	**Performance Standard 1(5)** states: 'The client … will conduct a process of environmental and social assessment, and establish and maintain an ESMS [*Environmental and Social Management System*] appropriate to the nature and scale of the project and commensurate with the level of its environmental and social risks and impacts. The ESMS will incorporate the following elements: (i) policy; (ii) identification of risks and impacts; (iii) management programs; (iv) organisational capacity and competency; (v) emergency preparedness and response; (vi) stakeholder engagement; and (vii) monitoring and review.' Where the client proposes to locate a project on lands traditionally owned or used by indigenous peoples, they should employ a process of FPIC, including the following steps: '1) Document efforts to avoid and otherwise minimise the area of land proposed for the project; 2) Document efforts to avoid and otherwise minimise impacts on natural resources and natural areas of importance to Indigenous People; 3) Identify and review all property interests and traditional resource uses prior to purchasing or leasing land; 4) Assess and document the Affected Communities of Indigenous Peoples' resource use without prejudicing any Indigenous Peoples' land claim …' (**Performance Standard 7(14)**).
United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP) (2007)	According to **Article 8(2)**, 'States shall provide effective mechanisms for prevention of, and redress for: … (b) Any action which has the aim or effect of dispossessing them of their lands, territories or resources.' **Article 32(1)** states: 'Indigenous peoples have the right to determine priorities and strategies for the development or use of their lands and territories'. The requirement for impact assessment and further due diligence actions is implicit in the requirement for consultation and free, prior and informed consent (**Article 32(2)**).
UN Guiding Principles on Business and Human Rights (2011)	**Principle 3** requires governments to establish laws and regulations to ensure businesses respect human rights, including in relation to due diligence. **Principle 15** states that business enterprises should have in place 'a human rights due diligence process to identify, prevent, mitigate and account for how they address their impacts on human rights'. **Principle 17** requires companies to carry out human rights due diligence, by 'assessing actual and potential human rights impacts, integrating and acting upon the findings, tracking responses, and communicating how impacts are addressed.' **Principle 18** requires 'meaningful consultation with potentially affected groups and other relevant stakeholders'. **Principle 19** requires companies to 'integrate the findings from their impact assessments across relevant internal functions and processes, and take appropriate action'.
International Council on Mining and Metals (ICMM) Position Statement on Indigenous Peoples and Mining (2013)	**Commitment 2** states that ICMM member companies commit to: 'Understand and respect the rights, interests and perspectives of Indigenous Peoples regarding a project and its potential impacts. Social and environmental impact assessments or other social baseline analyses will be undertaken to identify those who may be impacted by a project as well as the nature and extent of potential impacts on Indigenous Peoples and any other potentially impacted communities. The conduct of such studies should be participatory and inclusive to help build broad cross-cultural understanding between companies and communities …'

Sources: Texts of the relevant instruments

The World Bank Group (including its private sector lending arm, the International Finance Corporation or IFC) has been developing social safeguard policies since the 1980s, in response to controversial lending issues such as dam construction that resulted in displacement of communities. **The IFC's Environmental and Social Performance Standards (last updated in 2012)** require its clients (companies receiving finance from the IFC) to carry out an SIA as part of an integrated environmental and social impact assessment (ESIA) and as the basis for environmental and social management plans for the life of the project (Performance Standard 1). This requirement applies to 'all projects that have environmental and social risks and impacts' (Performance Standard 1, clause 4). In addition to these SIA requirements, IFC's Performance Standard 7 (Indigenous Peoples) requires the client to complete an indigenous peoples' development plan and to obtain the FPIC of affected indigenous communities if a project is likely to have negative impacts on their livelihoods or territories. Required steps in implementing an FPIC process (clause 14) include the documentation of efforts to avoid and minimise impacts on indigenous land use and natural areas of importance to indigenous peoples, and provision of appropriate compensation and benefit-sharing arrangements.

Other international financial institutions, such as the Asia Development Bank (ADB) and the European Bank for Reconstruction and Development (EBRD), also require SIAs for all projects with social risks and impacts, and additional specific requirements for operations likely to affect indigenous communities. The Equator Principles were launched in 2003 as a set of voluntary principles for the private finance industry and include a commitment to follow the IFC Performance Standards. The World Bank updated its Environmental and Social Framework in 2016, for the first time incorporating a commitment to FPIC.[3]

The adoption of the **UN Declaration on the Rights of Indigenous Peoples (UNDRIP) (2007)** and the growing international attention paid to indigenous rights and FPIC have further increased the need to consider indigenous rights in SIA practice. According to Article 8(2), 'States shall provide effective mechanisms for prevention of, and redress for … [a]ny action which has the aim or effect of dispossessing them of their lands, territories or resources.' The requirement for impact assessment and further due diligence actions is also implicit in the requirement for governments to seek the free, prior and informed consent of indigenous peoples prior to the approval of any project affecting their lands, territories and resources (Article 32(2)). The former UN Special Rapporteur on the

Rights of Indigenous Peoples, James Anaya (2013, p.21) has also emphasised that the state has due diligence obligations whether or not FPIC is a strict requirement in a particular case:

> [T]he State remains bound to respect and protect the rights of indigenous peoples and must ensure that other applicable safeguards are implemented as well, in particular steps to minimise or offset any limitation on the rights through impact assessments, measures of mitigation, compensation and benefit sharing. … Companies should conduct due diligence to ensure that their actions will not violate or be complicit in violating indigenous peoples' rights, identifying and assessing any actual or potential adverse human rights impacts of a resource extraction project.

UNDRIP confirms indigenous peoples' rights to 'determine priorities and strategies for the development or use of their lands and territories' (Article 32(1)). The relevance of this clause to SIA lies in the extent to which indigenous communities might determine the nature of the SIA process and wider decision-making processes related to an industrial development, as discussed below.

The adoption of the **UN Guiding Principles on Business and Human Rights (2011)** has brought human rights due diligence to the centre of SIA practice, as well as the evolution of human rights impact assessments (HRIA) as a distinct form of impact assessment (IFC, 2009; Abrahams and Wyss, 2010; Natour and Davis Pluess, 2013; Felner, 2013; Götzmann *et al.*, 2016; IPIECA, 2016). Principle 3 of the UN Guiding Principles requires governments to have in place appropriate legislation and regulation to ensure business respect for human rights, and to provide guidance, including on due diligence practices, as stated explicitly in the commentary. Principle 15 states that companies should have in place a 'human rights due diligence process to identify, prevent, mitigate and account for how they address their impacts on human rights'. This includes assessing impacts, acting upon the findings and communicating how impacts are addressed. Principle 18 states that the impact assessment process should '[i]nvolve meaningful consultation with potentially affected groups and other relevant stakeholders'. Principle 19 requires companies to 'integrate the findings from their impact assessments across relevant internal functions and processes, and take appropriate action'. Although the UN Guiding Principles do not explicitly refer to indigenous peoples, the commentary to Principle 12 states clearly that companies need to take into account other UN instruments that do relate to indigenous peoples.

Industry associations and initiatives have also developed guidance on SIA and in some cases specific requirements that are binding on their members. The **International Council on Mining and Metals (ICMM)'s Position Statement on Indigenous Peoples and Mining (2013)** states that its member companies commit to undertaking 'social and environmental impact assessments or other social baseline analyses' to identify potential impacts on indigenous peoples and other affected communities. The Position Statement emphasises the participatory and inclusive nature of impact assessments and the importance of 'building cross-cultural understanding between companies and communities'. The **UN Global Compact** requires its member companies to abide by ten principles, the first of which is to 'support and respect the protection of internationally proclaimed human rights'. The UN Global Compact's Business Reference Guide to UNDRIP (2013) references ILO 169 Article 7(3) in emphasising the importance of implementing social, environmental, spiritual and cultural impact assessments as part of the process of project-related due diligence.

SIA in practice

To provide guidance for implementing NEPA in the US, the Inter-Organisational Committee on Guidelines and Principles for SIA developed the Guidelines and Principles for Social Impact Assessment (1994), which were updated in 2003 (Esteves *et al.*, 2012). The guidelines comprise six principles focusing on: understanding local and regional settings; dealing with the key elements of the human environment; using appropriate methods and assumptions; providing quality information for decision making; ensuring that environmental justice issues are addressed; and establishing mechanisms for evaluation, monitoring and mitigation. They emphasise the value of incorporating local knowledge into decision making on projects, policies, plans and programmes.

The International Principles for Social Impact Assessment (Vanclay, 2003) were subsequently produced in broad consultation with practitioners and other experts. These were presented in a discussion paper commissioned by the International Association for Impact Assessment (IAIA), including a statement of the core values of the SIA community. The principles are meant to provide a basis for participatory development of sector and national guidelines. They highlight the goals of sustainability, equity, community development and empowerment, and the core values of justice and human rights protection. They underscore the right of people to be involved in decision-making on matters that affect their lives, and emphasise that the objective of SIA is to contribute to positive change: 'The focus of concern of SIA is a proactive stance to development and better development outcomes, not just the identification or amelioration of negative or unintended outcomes' (ibid., p.6).

In 2015, building on the 2003 International Principles, the IAIA produced a comprehensive guidance document, Social Impact Assessment: guidance for assessing and managing the social impacts of projects (Vanclay *et al.*, 2015). This document offers advice on good practice in SIA for practitioners, project developers, regulators, communities and others. It incorporates a section specifically focusing on indigenous, traditional, tribal and other land-connected peoples (pp.16-18). Among other things the guidance emphasises the importance of respecting indigenous peoples' ability to say no to a project (whatever the legal requirements); respecting legal and customary land rights and protecting sacred sites; and incorporating indigenous values, interests and worldviews when designing baselines and monitoring programmes. The 2015 IAIA guidance identifies four phases of SIA (Vanclay *et al.*, 2015, p.8) (see Box 1).

SIA practice has evolved particularly in the context of international projects in response to the project finance requirements of the IFC and other international financial institutions. SIA and EIA are frequently carried out as an integrated environmental and social impact assessment (ESIA) or incorporating a health impact assessment (ESHIA). SIA has evolved from being a tool for predicting impacts prior to development and now includes a social management plan and related plans to monitor, evaluate, report, review and respond to change throughout the project lifecycle (Franks, 2012). Depending on the nature and severity of project impacts, the IFC might require a stakeholder engagement plan, a community health and safety plan, a resettlement action plan, a local procurement plan (creating local jobs and business opportunities), an indigenous peoples' development plan, and a company-community grievance mechanism. These documents need to cover the whole project cycle (including decommissioning and post-closure) and should feed into a company's internal management systems. International good practice is for a company to establish an integrated management system certified to the International Organisation for Standardisation's ISO 140001 standard.[4] A renewed SIA process is recommended at key project phases, including construction, operations and closure (Vanclay *et al.*, 2015).

BOX 1. The four phases of social impact assessment

Phase 1: Understand the issues

1. Gain a good understanding of the proposed project.

2. Clarify all roles and responsibilities, including relationships to other studies being undertaken; identify relevant national laws and/or international guidelines.

3. Identify the preliminary 'social area of influence' of the project, likely impacted and beneficiary communities (nearby and distant), and stakeholders

4. Gain a good understanding of the affected communities by preparing a Community Profile (stakeholders; socio-political setting; local needs, interests, values, aspirations; gender analysis; historical experience; community assets/weaknesses; optional opinion survey).

5. Fully inform community members about the project; experience from similar projects; how to be involved in the SIA; procedural rights; access to grievance/feedback mechanisms.

6. Devise inclusive participatory processes and deliberative spaces to help community members understand and evaluate impacts/benefits; make informed decisions; discuss desired futures; contribute to mitigation and monitoring plans; and prepare for change.

7. Identify the social/human rights issues that have potential to be of concern.

8. Collate relevant baseline data for key social issues.

Phase 2: Predict, analyse and assess the likely impact pathways

9. Determine the social changes/impacts likely to result from the project and its alternatives.

10. Carefully consider the indirect (or second and higher order) impacts.

11. Consider how the project will contribute to the cumulative impacts on host communities.

12. Determine how the various affected groups and communities will likely respond.

13. Establish the significance of the predicted changes (i.e. prioritise them)

14. Contribute to design and evaluation of project alternatives, including no go and other options.

Phase 3: Develop and implement strategies

15. Identify ways of addressing potential negative impacts (e.g. avoid, mitigate, compensate).

16. Develop and implement ways of enhancing benefits and project-related opportunities.

17. Develop strategies to support communities in coping with change.

18. Develop and implement appropriate feedback and grievance mechanisms.

19. Develop an Impacts and Benefit Agreement (IBA) between communities and developer.

20. Develop a social impact management plan to implement the IBA.

21. Establish partnerships (government, industry, civil society) for implementation/monitoring.

22. Develop and implement ongoing social performance plans

Phase 4: Design and implement monitoring programmes

23. Develop indicators to monitor change over time.

24. Develop a participatory monitoring plan.

25. Implement adaptive management and a social management system.

26. Undertake evaluation and periodic review (audit).

Source: Based on Vanclay *et al.*, 2015, p.7

A key distinguishing feature of SIA is that it focuses not only on mitigating negative impacts, but also on enhancing the benefits provided by a project. Community agreements, known variously as benefit-sharing agreements, impact and benefit agreements (IBAs) or community development agreements (CDAs), are frequently negotiated for extractive industry projects and incorporate an analysis of impacts as well as an agreed plan for the distribution and enhancement of benefits (Wilson, 2017). While twenty years ago the linkages between agreement-making and SIA were first starting to be explored (O'Faircheallaigh, 1996), now a community agreement is more frequently included into the main objectives of an SIA process (Hansen *et al.*, 2016; Vanclay *et al.*, 2015).

SIA is seen as an essential foundation for a process of FPIC. For instance, the UN Committee on Economic, Social and Cultural Rights (CESCR) and the UN Committee on the Elimination of Racial Discrimination (CERD) have clarified that obtaining FPIC requires systematic impact assessments to determine the extent to which indigenous peoples' rights may be infringed upon by extractive industry projects (Doyle and Whitmore, 2015). Esteves *et al.*

(2012) believe that with the rise in calls for FPIC, the purpose of SIA potentially shifts to being the process that enables FPIC to occur, with the outcome being a negotiated agreement.

In practice, SIAs may differ in their detail from the outline provided in Box 1, but the phases of the assessment tend to be the same. Increasingly, ESIAs and environmental and social management plans are being made available online. This helps in understanding how they are put together, and what kinds of issues emerge as thematic chapters in an impact assessment. This is particularly useful in considering how a particular context might influence what is incorporated into an ESIA (see Annex 1 for a list of projects and links to the online assessments). Box 2 provides an indicative list of thematic sections that might constitute a typical SIA.

In some SIAs 'indigenous peoples' might form a separate chapter, but in many cases it is better if indigenous issues are addressed throughout, so as to encourage integrated consideration in related management plans e.g. cultural heritage, as well as comparison of relevant statistics (e.g. education levels, mortality rates).

BOX 2. Indicative thematic sections for an SIA

1. **Regulatory framework** (relevant international standards, national/regional legislation, sector specific legislation, customary law)

2. **Administrative divisions and governance structure** (national, regional, local levels of governance, international relations)

3. **Population/demographics** (gender/age/ethnicity, migration trends, religion, vulnerable groups)

4. **Economy** (employment, key sectors, business environment, financial services institutions, labour rights/working conditions, informal livelihoods, income, poverty/inequality)

5. **Infrastructure** (utilities, electricity, telecommunications, waste management, housing, transport infrastructure, markets/trade links, recreational facilities)

6. **Community health, safety and security** (health of population, mortality rates, health services, water/sanitation, road safety, fire services, disaster management services, police/security services, access to justice)

7. **Education** (literacy, education levels by gender, education and training institutions/services)

8. **Social problems** (crime, alcohol/drugs, prostitution, child/forced labour, employment inequalities, social tensions and conflict)

9. **Land tenure and use** (types of land and natural resource use, water use and availability, private/customary forms of use and ownership, types of agriculture/livestock ownership)

10. **Cultural heritage** (archaeological finds, indigenous sacred sites, historical buildings)

11. **Civil society** (trust, civic involvement, press freedom, freedom of association, civil society activism, trade unions, mass media, social media, indigenous rights groups, environmental groups, non-governmental community support organisations)

Source: Based on: existing published/non-published SIAs

In some cases a more targeted cultural impact assessment may be required. The Akwé: Kon Guidelines (2004) were specifically aimed at protecting indigenous rights and traditional resource use practices in the face of commercial interventions, including extractive industry projects, that will have an impact on biodiversity. The guidelines include steps for carrying out environmental, social and cultural impact assessments, and they advocate an integrated assessment process incorporating all three of these elements. Clause 24 identifies the issues that are of particular interest in a cultural impact assessment:

Through the cultural impact assessment process, and particularly during the screening and scoping phases, the issues that are of particular cultural concern should be identified, such as cultural heritage, religions, beliefs and sacred teachings, customary practices, forms of social organisation, systems of natural resource use, including patterns of land use, places of cultural significance, economic valuation of cultural resources, sacred sites, ceremonies, languages, customary law systems, and political structures, roles and customs. The possible impacts on all aspects of culture, including sacred sites, should therefore be taken into consideration while developing cultural impact assessments.

The Akwé: Kon Guidelines suggest the following scope for a cultural impact assessment (Box 3).

BOX 3. Elements of a cultural impact assessment

- **Consider possible impacts on continued customary use of biological resources:** The loss of genetic diversity that is maintained and fostered by such customary use may lead to a loss of associated traditional knowledge, innovations and practices.

- **Consider possible impacts on the respect, preservation, protection and maintenance of traditional knowledge, innovations and practices:** Due consideration should be given to the holders of traditional knowledge and the knowledge itself. Customary laws governing ownership, access, control, use and dissemination of traditional knowledge, innovations and practices should be observed. Protocols should be followed regarding disclosure of secret or sacred knowledge. In the event of such disclosure, prior informed consent and proper protection measures should be ensured.

- **Establish protocols to facilitate proper conduct on sacred sites and traditional lands:** These may include behaviour when visiting communities, particular sites, or when dealing with members of indigenous and local communities. Protocols should respect regulations already existing under relevant national, sub-national or community self-government legislation.

- **Consider possible impact on sacred sites and associated ritual or ceremonial activities:** Project personnel should recognise that many sacred sites, and areas or places of other cultural significance may have important functions with respect to the conservation and sustainable use of biological diversity and, by extension, the maintenance of the natural resources upon which such communities rely for their well-being. If a sacred site is likely to be affected, the assessment should include selection of an alternative site for development, in consultation with the site custodians and the affected community as a whole. Where no law exists to protect the site, the community may wish to develop protocols regarding the site in the context of the proposed development.

- **Respect the need for cultural privacy:** Privacy should be respected especially with regard to important rituals and ceremonies, such as those associated with rite-of-passage and death, and also to ensure that the activities of companies do not interfere with the daily routines and other activities of such communities.

- **Consider possible impacts on the exercise of customary laws:** If the development requires the introduction of an outside work-force, or requires changes in local customary systems (e.g. regarding land tenure, distribution of resources and benefits), conflicts may result. It may therefore be necessary to codify certain parts of customary law, clarify matters of jurisdiction, and negotiate ways to minimise breaches of local laws.

Source: Abridged from Akwé: Kon Guidelines (2004), Section IV

What are the main challenges?

Scope, timing and integration

It is well recognised that social impacts (unlike environmental impacts) start long before project approval is required, even at the stage where the presence of a mineral resource is just a rumour, or when a project is only anticipated (Vanclay, 2012). Perceptions and expectations can lead to real consequences such as anxiety and tension (Burge, 2004). Therefore meaningful community engagement, the gathering of social baseline data, and the management of social issues need to start as early as possible, and continue throughout the project lifecycle.

The first activities of an extractive industry project to physically affect communities often relate to exploration, especially if the development is to take place on land. This often means that the company carrying out the consultation is not a major corporation but a smaller junior company with less experience and fewer resources (IFC, 2014). Frequently such companies carry out exploration with a view to selling the project on to a larger company later, and so have less interest in building a long-term relationship with the community. SIAs are generally required by law only prior to project construction, with some exceptions such as Greenland, which requires an SIA for exploration activities (Hansen et al., 2016). Government regulation rarely requires consultation for exploration activities, despite evidence that this could help to avoid community tension and conflict (Wilson, 2016).

SIA is generally viewed as a one-off activity for the purpose of securing project approval (including regulatory approval or FPIC). Yet it may not be possible to identify all project impacts prior to the construction phase of a project, and some may arise later in project development (Markussen-Brown and Simms, 2011). As such, SIA should be an ongoing element of management plans and impact-benefit agreements, with new assessments carried out if there are changes in project plans or if new issues arise in the course of project implementation (Vanclay et al., 2015). Social management plans need to be flexible enough to accommodate the results of additional studies and to modify practice in response.

Social management plans cannot be the sole responsibility of the project operator. During construction, in particular, it is often the project contractors who are working closest to communities and need to have heightened awareness and strategies to manage social impacts, both predicted impacts and those that may arise in the course of the construction. International good practice requires contractors to develop their own social management plans to guide their activities, and this involves good communication with (and accountability to) both the communities and the project operating company (Wilson and Kuszewski, 2011).

A further challenge is the lack of consideration of the cumulative effects of multiple projects taking place in the same area (Esteves et al., 2012; Markussen-Brown and Simms, 2011) or the effects of a number of developments in one place over time bringing significant social and economic changes and affecting people's resilience (positively or negatively) (Ross, 1990). Many SIAs (and ESIAs) cover only a single project, without a thorough analysis of the potential cumulative impacts. Hansen et al (2016) identify the need for a comprehensive framework and plan or regulatory strategy to evaluate and manage the cumulative effects of projects from the earliest stages.

Building shared understanding of issues and approaches

Efforts by Vanclay and others to build shared understanding of terminology and methods have had some success, notably with the publication of IAIA's 2015 guidance document (Vanclay et al., 2015). Further shared understanding has been developed as international financial institutions have established a standard requirement for an integrated ESIA for projects with significant environmental and social impacts. SIAs and social assessment guidelines developed for different contexts tend to incorporate broadly comparable sets of activities. National legislation is also evolving, including in countries less experienced with resource development. For example, Greenland has incorporated the 2003 International Principles into law (Hansen et al., 2016). SIA design and methods have evolved through the implementation of guidelines and principles in practice. Companies and consultancies learn from and apply their own previous experience, and increasingly this experience is being made accessible online (see Annex 1), although this still does not constitute common practice. There is an emerging consensus around the linkages between SIA, FPIC and community agreements, along with an understanding that contextual factors will require a certain amount of flexibility in approach. Practices have evolved further through protest, conflict and court cases (Doyle and Cariño, 2013).

Nevertheless, there is still some disagreement, or lack of understanding, about certain aspects of SIA terminology and practice. SIA 'effectiveness' can be interpreted in different ways by different people: for example, a company may see 'project approval' or a 'social licence to operate' as the target outcome of an

SIA, while an indigenous community may consider effectiveness in terms of the degree of control they have over the subsequent outcomes (e.g. impact mitigation and creation of socio-economic opportunities) (O'Faircheallaigh, 2009). This kind of fundamental mismatch of vision can greatly affect the SIA procedures, the weight given to different risks identified in the assessment, and the nature of the management plans established to manage longer-term outcomes. This also has an effect on the 'social licence', i.e. the extent to which the project itself is accepted by the community.

There is also a great deal of variability around the implementation of SIA in practice. Much of this relates to the influence of contextual factors; some of it relates to different requirements and ways of working. The nature of an SIA written by a professional consulting company on behalf of a multinational corporation will be different from one undertaken by a development agency, or one commissioned independently by a community with much greater local participation (Vanclay, 2003). The variability also relates to the levels of experience and competence of the practitioners hired to implement the process, the lack of effective review processes in many cases, and a tendency throughout the system for social issues management to be taken less seriously than more technical environmental matters (Wong, 2015; O'Faircheallaigh, 2009). The quality of social science and the results produced should not be dependent on who pays the bills. Indeed, consultants generally have sufficient integrity not to work to achieve the preconceived results of whoever has commissioned the assessments. Unfortunately, though, this is the perception that many communities have when they are not consulted or when consultants fail to take into account their needs, concerns and opinions.

Esteves *et al*. (2012, p.40) observe that '[o]ne of the barriers to innovative, positive development outcomes is the limited understanding and skills of those who commission SIAs.' There is often a lack of clarity about the purpose of an SIA, and the methods and assumptions used are often unclear. Social and cultural issues are rarely prioritised adequately and SIA findings are often poorly integrated with other elements of an 'integrated' ESIA.

The ability to source adequate data for the analysis also depends very much on the context. In some jurisdictions it is difficult to find reliable public statistics or to use participatory methods to involve the community in the assessment process. A starting point in addressing this challenge is to work with local decision-makers and industry partners to develop a common understanding of the purpose of the ESIA before starting on the work – and seek to overcome social and cultural barriers to participation from the outset, by explaining the purpose of the close community engagement required. Yet even where community participation is socially and culturally feasible, it is still rarely carried out to its full potential (see below).

Enabling meaningful community participation

According to the 2003 International Principles, and international good practice experience, SIA is meant to be a participatory process. As Vanclay *et al*. (2015) note, the process of conducting an SIA and developing associated plans is an iterative one: information from stakeholders is incorporated into project planning and should influence decisions made. Even more desirable is for the planning itself to be inclusive or participatory and for affected communities to have control over the process of impact assessment and its outcomes (O'Faircheallaigh, 1996; Burge, 2004; Vanclay *et al*., 2015; Doyle and Whitmore, 2015).

It is widely understood that greater participation by local residents generates trust in the SIA process and leads to better quality information and understanding about the community and their aspirations and values, as well as potential impacts and development opportunities (Burge and Robertson, 1990). The impact assessment process itself can be a way of developing relations and trust directly between community and developer; yet it often fails in this regard (Papillon and Rodon, 2017; Hanna and Vanclay, 2013). There is a lack of consistency in standards and expectations of what public participation might entail, ranging from provision of information and a space for public comment, to the active involvement of stakeholders in shaping the SIA process and the inclusion of indigenous people in decision-making (Esteves *et al*., 2012).

In a 1996 study, O'Faircheallaigh noted that indigenous people had often been excluded from SIAs of projects or activities which affected them, or they had faced financial and cultural barriers to effective participation and difficulties in having their values acknowledged and their perspectives accepted as legitimate (O'Faircheallaigh, 1996). Even when it had taken place, greater inclusion of indigenous people in SIA processes had failed to enable them to shape the outcomes of development projects, reflecting a wider failure of decision-makers to integrate SIA effectively into decision making (ibid.). This state of affairs has not changed considerably over the past 20 years (Markussen-Brown and Simms, 2011; Esteves *et al*., 2012).

ESIA consultations are often poorly adapted to indigenous cultures, because of their very formal and often adversarial nature, as well as the dominance of formal scientific expertise and the lack of translation during hearing processes (Rodon and Papillon, 2017). Hansen *et al*. (2016) suggest that a consultation process needs to be led by an impartial consultation entity rather than by the company itself or consultants selected by the company. While this may be appropriate in some cases, it is also important for the process to encourage direct engagement between company technical experts (not only their public relations experts) and local people in order to address particular technical concerns (Wilson, 2012).

There may be reluctance to make the financial resources available or difficulties organising logistics for the community to gather and hold consultations, especially if members of the community are dispersed across a wide area practicing different types of livelihood activity (Doyle and Cariño, 2013). Community consultation can result in 'consultation fatigue' among communities and local governments, especially if there are multiple projects. This can be addressed to a degree through joint surveys and engagement processes (Franks *et al*., 2009; Hansen *et al*., 2015). Moreover, the institutional and legal arrangements in many countries tend to favour developers. The rights of industrial companies are often given precedence in negotiations or regulatory decisions. Indigenous peoples frequently need to bargain from a position of disempowerment in order for their rights to be respected (Doyle and Cariño, 2013).

Indigenous communities have emphasised the importance of them not only participating in, but also positively influencing the SIA process, for example by choosing the consultants, determining the data to be used, the priorities to be set and the scenarios to be considered, and employing methods that they can identify with (Ross, 1990; O'Faircheallaigh, 1996). Efforts have been made to tailor consultation processes and research techniques to be culturally appropriate and to enable maximum participation of the community, sometimes successfully, for example, in public consultation processes related to the Mackenzie Valley Pipeline in Canada (Nuttall, 2010; Novikova, 2014).

In some cases SIAs have been commissioned and led by indigenous groups themselves, often in response to an inadequate impact assessment process, as a submission to a public consultation (Ross, 1992; Chase, 1990). A framework for community SIA was developed in one aboriginal community in Australia, which was facing gold mining development. The community, working with a trusted external expert, chose

storytelling and oral history as a core method for conducting the assessment (Ross, 1990). This served to identify spiritual ties to place and customary land use practices over time, and provided a historical sense of the cumulative impacts on the community (ibid.).

There is growing experience of communities drawing up community protocols in advance of negotiations relating to industrial projects, so as to establish the ground rules for engagement and communication (Gibson Macdonald and Zezulka, 2015; Doyle and Cariño, 2013; Swiderska *et al*., 2012). The process of developing this kind of protocol allows a community to build consensus around their priorities and favoured consultation and decision-making processes in advance of project development. For developers, a community protocol provides clarity about matters such as appropriate procedures and who is to represent community interests.

Yet, even if a local community can take control of the 'social' elements of an impact assessment, their interests may not be recognised adequately in the context of the larger assessment process, within wider political and institutional structures and policy processes (Markussen-Brown and Simms, 2011). Indigenous peoples often lack status in wider impact-assessment and decision-making processes, and this status depends on the prevailing corporate and government policies (O'Faircheallaigh, 1996). However, SIA nonetheless has the potential to contribute to the realignment of political structures and the balance of power, not least due to the process of information sharing, which can serve to empower communities (ibid.). The increased use of social media worldwide also has great potential to influence the processes and outcomes of SIAs (Bers *et al*., 2014).

Building trust in the assessment process

Over the past 20 years, despite evolution in SIA techniques and communication practices, indigenous peoples (and other local communities) continue to express cynicism and a lack of trust in SIA processes. Sometimes this is because they do not trust the consultants hired by companies to carry them out, or because they feel that aspects important to them are not recognised in the scientific approaches taken in the studies, or because they feel isolated from the process altogether (Markussen-Brown and Simms, 2011). Indigenous communities regularly challenge the conclusions of impact assessment processes and deny their legitimacy as participatory decision-making processes (Papillon and Rodon, 2017). People may also lack faith in the capacities of government to provide a neutral view on a project and to defend the interests of the local community (Hansen *et al*., 2016).

Many of these challenges arise due to the lack of expertise among SIA practitioners (and EIA practitioners responsible for managing the overall process of which SIA is an integral part). From an indigenous peoples' perspective, ESIA consultants may not take enough time to understand and make plans to mitigate the impacts that are most important for indigenous people themselves, or the significance of impacts may be underestimated by consultants (Markussen-Brown and Simms, 2011). Even a desire for opportunities, such as job creation, can be mistakenly assumed. For instance, while many people assume that local people want to benefit from jobs created by a project, Hansen and Tejsner (2016) found that local Greenlanders frequently want to continue their traditional way of life rather than taking jobs in the extractive industries. This does not necessarily mean a local community will oppose a project, as some people see that the ability of a project to enliven the wider economy, or targeted support to traditional enterprises, are viable forms of extractive industry support for traditional economies (Wilson, 2012).

The provision of information itself is often problematic. Companies may fail to provide accurate or full information about a project and its impacts, while communication problems can arise for communities when dealing with companies or governments due to language barriers, differences in speech register, and differences in perspectives and worldviews (Doyle and Cariño, 2013). It is important that information be provided in the language of the local community and with respect for local traditions of information sharing (for example, in the case of predominantly oral societies). However, translation of assessment documentation can be very cumbersome and it may be better to combine summarised printed information with in-depth question and answer sessions and focus groups. Communities need time to read, analyse and understand any documentation provided. In some cases, civil society groups can help communities to understand impact assessments but this cannot substitute for direct engagement between community representatives and the experts who have prepared the material (Wilson et al., 2016).

Influencing outcomes

According to the 2003 International Principles, SIA is meant to help decision-makers understand the potential social consequences of their decisions before making them, and to enable indigenous and local communities to participate in shaping project outcomes. Yet these goals are rarely achieved by an SIA process (Hansen et al., 2016). O'Faircheallaigh (2009) concludes that SIA can be effective only if its political nature is recognised and appropriate strategies are developed, and if its findings and recommendations can be adequately translated into action, not just through project approval, but by influencing project performance on an ongoing basis.

Indigenous commentators are concerned about the risk that the mitigation measures designed during an ESIA will not be adequately implemented during project construction, operation and decommissioning (Markussen-Brown and Simms, 2011). To address this risk, international financial institutions such as the IFC employ a system of regular audits of projects likely to cause significant environmental and social impacts. The ESIA is translated into a series of actions plans and progress on developing these is audited several times a year by auditors representing the interests of the lenders.

In general, an impact assessment alone is not sufficient to create and build a relationship between indigenous communities and companies, or to provide an adequate foundation to secure the support (or the consent) of an indigenous community if there is no guarantee that they will succeed in shaping the actual decision-making process (Vanclay et al., 2015; Papillon and Rodon, 2017). Increasingly the negotiation of community agreements is therefore seen as an important step in an SIA process. This enables the community to negotiate the next steps, and sets a framework for ongoing management and monitoring of impacts and the delivery of benefits.

There are other forms of influence that indigenous communities can employ to ensure that a project follows up on the commitments in an SIA, or more broadly the human rights and indigenous rights commitments established in international instruments. An SIA process, particularly where it leads to a community agreement, can serve to balance power relations, but it can also have the opposite effect and limit the power of an indigenous community. O'Faircheallaigh (2013) observes that if communities are in a weak position or are unable to exploit opportunities offered through the SIA and community agreement processes, they can end up being worse off than before, as the signing of an agreement might preclude other avenues for influencing project outcomes, such as litigation or direct action.

Recommendations

Social impact assessment (SIA) is a participatory process of assessing and mitigating the negative impacts of a project and identifying and creating positive opportunities. It has been evolving since the 1970s; good practice is increasingly well understood and is being incorporated into international standards and national legislation. Where practice falls short is often in relation to the extent of local community involvement in providing insights, gathering data and setting priorities for an SIA; in the data analysis and development of conclusions; and in setting the framework and next steps to influence overall project outcomes in the longer term. The process is inherently political, as well as technical, and a key challenge is to balance power relations in the engagement and decision-making processes.

Practical recommendations that arise from this analysis include the following:

- **Community engagement and analysis of social issues should start early:** Social impacts are there from the earliest stages of a project, even when the rumours of a possible development start in a community. It is therefore essential for engagement and analysis of impacts (including community tension, anxiety, the building of expectations) to be well understood by those seeking to promote and implement a project. Government legislation should incorporate a requirement for community consultation at the phase of exploration, something which is surprisingly rare in regulations. Incorporating social assessment more into strategic planning processes would be also a good way to ensure that social issues are highlighted in the earliest stages.

- **SIA needs to be integrated effectively into wider assessments and decision-making processes:** An SIA is frequently carried out as part of a wider ESIA or as an additional requirement to an EIA. The social element needs to be taken as seriously as the environmental element, in the way it is funded, written and produced, and in its status for policy planning and decision-making on further steps. Cumulative impacts need to be considered at the stage of strategic planning and project level impact assessment, from a geographical and historical perspective. Elements of cultural impact assessment should also be incorporated into SIAs in indigenous communities, or separate (and integrated) cultural impact assessments carried out.

- **SIA is most effective as the basis for long-term plans and agreements:** Good practice requires social management plans to be implemented over the life of an oil, gas or mining project, including decommissioning and post-closure. It is not enough to gather information and assess impacts on a one-time basis, and there needs to be flexibility in the system for repeated assessments, as required, and for these to lead if necessary to changes in practice. Increasingly, SIAs are leading directly to community agreements and are seen as an important foundation for a process of free prior and informed consent (FPIC).

- **There is a need for greater control by indigenous communities over SIA and related decision-making processes:** It is well-understood that participatory processes provide better information, create trust and reduce risks. Participatory processes require greater involvement of affected indigenous communities in the setting of priorities, the choice of consultants, in supporting the data gathering and analysis, and in agreeing solutions and the nature of the future development. Indigenous communities might also commission their own impact assessments, implemented through a combination of trained local impact assessment experts, local resource users, and carefully selected external experts.

- **Transparency and accountability are essential elements of an SIA process:** The availability of SIAs online has helped a great deal with learning among the practitioner community, and in establishing shared standards and practices. For communities, it is often more important to have information in a more accessible form, in local languages, often with a combination of written summary documentation and face-to-face meetings to discuss the findings and next steps. It is important that commitments made in an SIA are transparent, so that affected communities can later hold companies and governments to account. Negotiated agreements are one way to ensure a greater degree of commitment, provided communities have been given enough leeway for genuine negotiation. Independent audit of social management plans can also serve to ensure delivery of the commitments made.

Annex 1. Some oil, gas and mining project ESIA documentation available online

Project	Location	Link
Amulsar Gold Project	Armenia	http://www.lydianinternational.co.uk/projects/amulsar/environmental-and-social-impact-assessment-esia
Baku-Tbilisi-Ceyhan Pipeline	Azerbaijan, Georgia, Turkey	http://www.bp.com/content/dam/bp-country/en_az/pdf/ESIAs/BTC-ESIA/BTC-ESIA-Azerbaijan-main-part.pdf
Gatsuurt Gold Mine Project	Mongolia	http://www.ebrd.com/work-with-us/projects/esia/centerra-global.html
Krumovgrad Gold Mine Project	Bulgaria	http://www.ebrd.com/work-with-us/projects/esia/krumovgrad-gold-mine-project.html
Mackenzie Gas Project	Canada	http://www.mackenziegasproject.com/theProject/regulatoryProcess/applicationSubmission/Applicationscope/EIS.html
Öksüt Gold Mine	Turkey	http://www.ebrd.com/work-with-us/projects/psd/centerra-turkey.html
PNG-LNG (liquefied natural gas project)	Papua New Guinea	https://pnglng.com/Environment/Environmental-Impact-Statement
Prinos Offshore Development Project	Greece	http://www.energean.com/wp-content/uploads/2016/03/ESIA-Full-Main-Report.pdf
Sakhalin-2 Project	Russia	http://www.sakhalinenergy.ru/en/library/folder.wbp?id=e15e01ea-ec75-4821-87d3-e1aa3a0d736c
Trans Adriatic Pipeline	Greece, Albania, Italy	https://www.tap-ag.com/resource-library/reference-documents/esia-documents
Tullow Oil (various activities)	Kenya	http://www.tullowoil.com/operations/east-africa/kenya/environmental-social/esia
Yamal LNG (liquefied natural gas project)	Russia	http://yamallng.ru/403/docs/ESIA%20ENG%20.pdf

1. Also translated as ethnological expert review (Martinova and Novikova, 2011).

2. These guidelines are known in full as the *Akwé: Kon Voluntary Guidelines for the Conduct of Cultural, Environmental and Social Impact Assessment regarding Developments Proposed to take place on, or which are Likely to Impact on, Sacred Sites and on Lands and Waters Traditionally Occupied or Used by Indigenous and Local Communities* (2004). Akwé: Kon (pronounced agway-goo) is a Mohawk term meaning 'everything in creation' and was provided by the Kahnawake community near Montreal, where the guidelines were negotiated. https://www.cbd.int/doc/publications/akwe-brochure-en.pdf

3. Earlier iterations of the World Bank's safeguards extended only to free, prior and informed *consultation*, not *consent*. The new Environmental and Social Framework can be found at: http://www.worldbank.org/en/news/feature/2016/08/05/the-new-environmental-and-social-framework

4. See http://www.iso.org/iso/iso14000

References

A. Legal documents and standards

Convention on Biological Diversity (CBD) (1992) https://www.cbd.int/convention/text/

Equator Principles http://www.equator-principles.com/

International Labour Organisation (ILO) Convention 169 concerning Indigenous and Tribal Peoples in Independent Countries (ILO 169) (1989) http://www.ilo.org/dyn/normlex/en/f?p=NORMLEXPUB:12100:0::NO::P12100_INSTRUMENT_ID:312314

International Finance Corporation (IFC) Environmental and Social Performance (2012) Standards http://www.ifc.org/performancestandards

International Council on Mining and Metals (ICMM) Indigenous Peoples and Mining Position Statement (2013) http://www.icmm.com/en-gb/publications/indigenous-peoples-and-mining-position-statement

ISO 14001:2015 Standard http://www.iso.org/iso/iso14000

National Environmental Policy Act (NEPA) (USA) (1969) https://www.epa.gov/nepa

OECD Guidelines for Multinational Enterprises: https://www.oecd.org/corporate/mne/48004323.pdf

UN Declaration on the Rights of Indigenous Peoples (UNDRIP) (2007) http://www.un.org/esa/socdev/unpfii/documents/DRIPS_en.pdf

UN Global Compact https://www.unglobalcompact.org/

UN Guiding Principles on Business and Human Rights (UN Guiding Principles) (2011) https://business-humanrights.org/en/un-guiding-principles

World Bank Environmental and Social Framework (2016) http://www.worldbank.org/en/news/feature/2016/08/05/the-new-environmental-and-social-framework

B. Papers and reports

Abrahams, D. and Wyss, Y. (2010) *Guide to Human Rights Impact Assessment and Management*. Washington: International Finance Corporation, UN Global Compact and the International Business Leaders Forum. http://www.globalgovernancewatch.org/docLib/20140206_hriam-guide-092011.pdf

Anaya, J. (2013) *Report of the Special Rapporteur on the rights of indigenous peoples, James Anaya: Extractive industries and indigenous peoples*. UN General Assembly. Report No. A/HRC/24/41. http://www.ohchr.org/EN/HRBodies/HRC/RegularSessions/Session24/Documents/A-HRC-24-41_en.pdf

Bers, C., Krywkow, J., Bakkes, J., Vinke-de-Kruiif, J., Hordijk, L. and Pahl-Wostl, C. (2014) Enhancing social impact assessment methods. In TIAS Quarterly, Vol.1 (2014). Osnabruck, Germany: The Integrated Assessment Society.

Birley, M. (2012) *Health Impact Assessment: Principles and Practice*. Oxford: Routledge.

Burge, R. and Robertson, R. (1990) 'Social impact assessment and the public involvement process.' In *Environmental Impact Assessment Review*, Vol.10, pp.81-90.

Burge, R. (2004) *The concepts, process and methods of social impact assessment*. Wisconsin, USA: Social Ecology Press.

CBD (2004) *Akwé: Kon: Voluntary guidelines for the conduct of cultural, environmental and social impact assessment regarding developments proposed to take place on, or which are likely to impact on, sacred sites and on lands and waters traditionally occupied or used by Indigenous and local communities*. Montreal: Secretariat of the Convention on Biological Diversity. https://www.cbd.int/doc/publications/akwe-brochure-en.pdf

Chase, A. (1990) 'Anthropology and impact assessment: development pressures and indigenous interests in Australia.' In *Environmental Impact Assessment Review*, Vol.10, No.1-2, pp.11-23.

Doyle, C. and Cariño, J. (2013) *Making free, prior and informed consent a reality: indigenous peoples and the extractive sector.* Indigenous Peoples Links. http://solutions-network.org/site-fpic/files/2012/09/Making-Free-Prior-Informed-Consent-a-Reality-DoyleCarino.pdf

Doyle, C. and Whitmore, A. (2014) *Indigenous peoples and the extractive sector: towards a rights-respecting engagement.* Baguio City, Philippines: Tebtebba Foundation. https://www.google.co.uk/search?q=doyle+and+whitmore+2014&ie=utf-8&oe=utf-8&client=firefox-b&gfe_rd=cr&ei=DL8cWISQEYn38Af977n4Aw

Esteves, A.M., Franks, D. & Vanclay, F. (2012) 'Social impact assessment: the state of the art.' In *Impact Assessment and Project Appraisal*, Vol.30, No.1, pp.35-44.

Felner, E. (2013) *Study on Human Rights Impact Assessments: a review of the literature, differences with other forms of assessments and relevance for development.* Washington: World Bank. http://siteresources.worldbank.org/PROJECTS/Resources/40940-1331068268558/HRIA_Web.pdf

Franks, D. (2012) *Social impact assessment of resource projects.* Crawley, Western Australia: International Mining for Development Centre. http://im4dc.org/wp-content/uploads/2012/01/UWA_1698_Paper-02_Social-impact-assessment-of-resource-projects1.pdf

Franks, D., Fidler, C., Brereton, D., Vanclay, F. & Clark, P. (2009) Leading Practice Strategies for addressing the Social Impacts of Resource Developments. St Lucia: Centre for Social Responsibility in Mining, Sustainable Minerals Institute, The University of Queensland. http://www.csrm.uq.edu.au/docs/Franks_etal_LeadingPracticeSocialImpacts_2009.pdf

Gibson Macdonald, G. and Zezulka, G. (2015) *Understanding successful approaches to free, prior and informed consent in Canada.* Part 1. Boreal Leadership Council, Canada. http://borealcouncil.ca/wp-content/uploads/2015/09/BLC_FPIC_Successes_Report_Sept_2015_E.pdf

Götzmann, N., Vanclay, F. and Seier, F. (2016) 'Social and human rights impact assessments: what can they learn from each other?' In I*mpact Assessment & Project Appraisal*, Vol.34, No.1, pp.14-23. http://dx.doi.org/10.1080/14615517.2015.1096036

Hanna, P. and Vanclay, F. (2013) 'Human rights, indigenous peoples and the concept of free, prior and informed consent.' In *Impact Assessment and Project Appraisal*, Vol.31, No.2, pp.146-157.

Hansen, A.M., Vanclay, F., Croal, P. and Hurup Skjervedal, A-S. (2016) 'Managing the social impacts of the rapidly-expanding extractive industries in Greenland,' in *The Extractive Industries and Society*, Vol.3, pp.25-33.

Hansen, A.M. and Tejsner, V.P. (2016) 'Challenges and opportunities for residents in the Upernarvik district while oil companies are making a first entrance in Baffin Bay.' In *Arctic Anthropology*, Vol. 53, No.1, pp.84-94.

Hansen, A.M., Adamson, J., Christiansen, H.B., Garpestad, E. and Le Breton, H. (2015) Corporate collaboration: drivers behind a joint industry social baseline study related to hydrocarbon exploration in Greenland. In *Impact assessment and project appraisal*, Vol.33, No.4, pp.1-6.

Ibenholt, K, Rassmussen, I. and Skjelvik, J.M. (2016) Gruvedrift ved Repparfjorden – gjennomgang av utredininger om samfunnsmessige konsekvenser. (Mining at Repparfjorden – review of studies on social impacts) Oslo: Viste Analyse. https://www.vista-analyse.no/no/publikasjoner/gruvedrift-ved-repparfjorden-gjennomgang-av-utredninger-om-samfunnsmessige-konsekvenser/

IFC (2014) *A strategic approach to early stakeholder engagement: a good practice handbook for junior companies in the extractive industries.* Washington DC: International Finance Corporation. https://commdev.org/userfiles/FINAL_IFC_131208_ESSE%20Handbook_web%201013.pdf

IFC (2009) *Introduction to health impact assessment.* Washington: International Finance Corporation. http://www.ifc.org/wps/wcm/connect/a0f1120048855a5a85dcd76a6515bb18/HealthImpact.pdf?MOD=AJPERES

IPIECA (2016) *Health impact assessment: a guide for the oil and gas industry.* London: IPIECA the international oil and gas industry association for environmental and social issues. http://www.ipieca.org/resources/good-practice/health-impact-assessment-a-guide-for-the-oil-and-gas-industry/

Markussen-Brown, A. and Simms, M. (2011) *Environmental and social impact assessments: a practical guide for indigenous peoples in Guyana*. Canada, Guyana and UK: The North-South Institute, the Amerindian Peoples Association and the Forest Peoples Programme. http://www.nsi-ins.ca/wp-content/uploads/2012/10/2011-Environmental-and-Social-Impacts-Assessment-Practical-Guide-for-Indigenous-Peoples-in-Guyana.pdf

McCullough, A. (2016) *Advancing the governance of extractives at the local level: towards politically smart support*. London: Overseas Development Institute. https://www.odi.org/publications/10373-advancing-governance-extractives-local-level-towards-politically-smart-support

Natour, F. and Davis Pluess, J. (2013) *Conducting an effective human rights impact assessment: guidelines, steps and examples*. Paris: BSR. https://www.bsr.org/reports/BSR_Human_Rights_Impact_Assessments.pdf

Novikova, N.I. (2014) Okhotniki i neftyaniki: issledovanie po yuridicheskoi antropologii. (Hunters and oil workers: research in legal anthropology.) Moscow: Nauka.

Novikova, N. and Wilson, E. (2017) *Anthropological expert review in the Russian Federation*. Ájluokta/Drag, Norway: Árran Lule Sami Centre.

Nuttall, M. (2010) *Pipeline dreams: People, Environment and the Arctic Energy Frontier.* International Working Group on Indigenous Affairs, Document 126. IWGIA, Copenhagen. www.iwgia.org/iwgia_files_publications_files/0451_Pipeline_dreams.pdf

OECD (2016) Due diligence guidance for meaningful stakeholder consultation in the extractive sector. Geneva: Organisation for Economic Co-operation and Development. https://mneguidelines.oecd.org/stakeholder-engagement-extractive-industries.htm

O'Faircheallaigh, C. (1996) *Making social impact assessment count: a negotiation-based approach for indigenous peoples*. Aboriginal Politics and Public Sector Management Research Paper No.3. http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.458.5101&rep=rep1&type=pdf

O'Faircheallaigh, C. (2009) 'Effectiveness in social impact assessment: Aboriginal peoples and resource development in Australia.' In *Impact Assessment and Project Appraisal*, Vol.27, No.2, pp.95-110.

O'Faircheallaigh, C. (2013) 'Community development agreements in the mining industry: an emerging global phenomenon.' In *Community Development*, Vol.44, No.2, pp.222-238.

Papillon, M. and Rodon, T. (2017) Proponent-indigenous agreements and the implementation of the right to free, prior and informed consent in Canada. In *Environmental Impact Assessment Review*. Vol, 62, pp.216-224.

Ross, H. (1990) Community social impact assessment: a framework for indigenous peoples. In *Environmental Impact Assessment Review*, Vol.10, pp.185-193.

Ross, H. (1992) Opportunities for aboriginal participation in Australian social impact assessment. In *Impact Assessment*, Vol.10, No.1, pp.47-75.

Swiderska, K. *et al*. (eds.) (2012) *Biodiversity and culture: exploring community protocols, rights and consent*. Participatory Learning and Action, No.65. London: International Institute for Environment and Development. http://pubs.iied.org/14618IIED.html

UN Global Compact (2013) Business reference guide to UNDRIP. New York: UN Global Compact. https://www.unglobalcompact.org/library/541

Vanclay, F. (2003) International Principles for Social Impact Assessment. Impact Assessment & Project Appraisal Vol. 21, No.1, pp.5-11. http://www.iaia.org/uploads/pdf/IAIA-SIA-International-Principles.pdf

Vanclay, F. (2012) 'The potential application of Social Impact Assessment in integrated coastal zone management'. In *Ocean & Coastal Management*, Vol.68, pp.149-156. http://dx.doi.org/10.1016/j.ocecoaman.2012.05.016

Vanclay *et al*. (2015) *Social Impact Assessment: Guidance for assessing and managing the social impacts of projects*. Fargo, USA: International Association for Impact Assessment. http://www.iaia.org/uploads/pdf/SIA_Guidance_Document_IAIA.pdf

Wilson E. (2012) 'The Oil Company, the Fish, and the Nivkhi: the cultural value of Sakhalin salmon', in B. J. Colombi and J. F. Brooks (eds.) *Keystone Nations: Indigenous Peoples and Salmon across the North Pacific*, SAR Press: New Mexico, USA.

Wilson, E. (2016) 'What is the social licence to operate? Local perceptions of oil and gas projects in Russia's Komi Republic and Sakhalin Island. In *Extractive industries and society*, Vol.3, pp.73-81.

Wilson E. and Kuszewski, J. (2011) *Shared value, shared responsibility: a new approach to managing contracting chains in the oil and gas sector*. London: International Institute for Environment and Development. http://pubs.iied.org/16026IIED/

Wilson, E. (2017) *What is benefit sharing?* Ájluokta/Drag, Norway: Árran Lule Sami Centre.

Wilson, E., Best, S., Blackmore, E. and Ospanova, S. (2016) *Meaningful community engagement in the extractive industries*. London: International Institute for Environment and Development. http://pubs.iied.org/16047IIED/

Wong, C.H.M. and Ho, W. (2015) 'Roles of social impact assessment practitioners.' In *Environmental Impact Assessment Review*, Vol.50, pp.124-133.

Acronyms and abbreviations

ADB	Asian Development Bank
CBD	Convention on Biological Diversity
CDA	community development agreement
CERD	UN Committee on the Elimination of Racial Discrimination
CESCR	UN Committee on Economic, Social and Cultural Rights
EBRD	European Bank for Reconstruction and Development
EIA	environmental impact assessment
ESHIA	environmental, social and health assessment
ESIA	environmental and social impact assessment
ESMS	environmental and social management system
FPIC	free, prior and informed consent
HRIA	human rights impact assessment
IBA	impact benefit agreement (or impact and benefit agreement)
IAIA	International Association for Impact Assessment
ICMM	International Council on Mining and Metals
IFC	International Finance Corporation
ILO	International Labour Organisation
ISO	International Organisation for Standardisation
NEPA	National Environmental Policy Act (USA)
OECD	Organisation for Economic Cooperation and Development
OHCHR	Office of the United Nations High Commissioner for Human Rights
SIA	social impact assessment
UNDRIP	UN Declaration on the Rights of Indigenous Peoples