
Extractive Industries in the North – What about Environmental Law and Indigenous Peoples' Rights?

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1. Introduction

The Research Group on Sami Law and Indigenous Peoples' Rights and the K.G. Jebsen Centre for the Law of the Sea at The Faculty of Law, University of Tromsø – The Arctic University of Norway, hosted an International Law Symposium in Tromsø in November 2013. We invited leading experts on environmental law and indigenous peoples' rights to Tromsø for discussions of legal questions regarding extractive industries in the North. The main question to be addressed was whether indigenous peoples' rights and environmental concerns are adequately addressed in extractive industry-processes in the North. The topics are at the core of the priority areas of the Faculty of Law and at University of Tromsø and are also highly relevant from a global perspective.

The topicality of legal research in this field is unquestionable. It is therefore a great pleasure that the outcome of the conference is a series of important new research papers on extractive industries. This special thematic issue of the *Nordic Environmental Law Journal* on extractive industries in the North hopefully will also contribute to further legal discussions on this subject. In this article, I will give a brief introduction to the legal questions and the topics discussed at the conference.¹

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¹ For more, see Susann Funderud Skogvang: "Legal questions regarding mineral exploration and exploita-

2. Topicality

There are seven billion people in the world. More than 370 million of them, spread across some 70 countries worldwide, are considered to be indigenous.² Most indigenous peoples live in rural and vulnerable areas, such as the Arctic.³ Lands and natural resources are vital for their livelihood and culture. Therefore, to a larger extent than do urban people, they depend on rights to natural resources and the management of natural resources for their subsistence. The interest in preserving these resources from a long-term perspective is significant. The close relationship with the environment also makes indigenous peoples particularly vulnerable to the impairment of their rights through environmental harm.⁴

Indigenous territories in the North host rich deposits of oil, gas and different types of valuable minerals.⁵ This fact makes international

tion in indigenous areas", *Michigan State International Law Review* 2013, pp. 321–345.

² See UN Permanent forum on indigenous issues webpage: "Indigenous Peoples, Indigenous Voices – Factsheet" available at: http://www.un.org/esa/socdev/unpfii/documents/5session_factsheet1.pdf (last visited April 2014)

³ Anton, Donald K. & Dinah L. Shelton: *Environmental Protection and Human Rights*, New York Cambridge University Press, 2011, p. 545.

⁴ Report of the Independent Expert on the issue of human rights obligations relating to the enjoyment of a safe, clean, healthy and sustainable environment, John H. Knox, A/HRC/25/53, p. 20.

⁵ Andy Whitmore (ed.): *Pitfalls and Pipelines. Indigenous Peoples and Extractive Industries*, 2012, [hereinafter *Pitfalls and Pipelines*] p. 4–5 and Asbjørn Eide: «Indigenous Self-Government in the Arctic, and their Right to Land and

commercial industries very eager to enter indigenous territories. Permitting extractive industries access to such areas is fairly controversial and has been vigorously debated for years.⁶ There are numerous reports of ongoing human rights violations related to extractive industry activities in indigenous territories.⁷ These violations include the pollution of drinking water, the loss of grazing land and forced relocation of peoples. Different UN entities concerned with the rights of indigenous peoples, such as the UN Permanent Forum on Indigenous Issues and the UN Special Rapporteur on the Rights of Indigenous Peoples, have lately expressed great concern about extractive industries.⁸

The ongoing conflicts in Sweden (Kallak and Rönnbäcken) are illustrative of the controversy surrounding mining in vulnerable areas and on reindeer pasture land. *Labba* has elaborated on these conflicts between mining and reindeer-herding in Sweden in her article.⁹ *Garipov* has presented a similar picture for Russian reindeer-herding.¹⁰ A study on environmental impacts of mining in Sweden documents that mining companies are violating the Swedish Environmental

Natural Resources», in *The Yearbook of Polar Law*, Leiden/Boston: Martinus Nijhoff, 2009, p. 246.

⁶ Reports of the Special Rapporteur on the Rights of Indigenous Peoples, James Anaya: *Extractive industries operating within or near indigenous territories* (2011) A/HRC/18/36 and *Extractive Industries and Indigenous Peoples* (2013) A/HRC/24/41 [hereinafter *Extractive industries and indigenous peoples*] with further references.

⁷ *Pitfalls and pipelines* page xxi.

⁸ Permanent Forum on Indigenous Issues [hereinafter PFII], Report on the Twelfth Session (20–31 May 2013), U.N. Doc. E/3013/43 (2013), and *Extractive industries and indigenous peoples*, (2013) A/HRC/24/41. It can be mentioned that PFII have presented reports on how extractive industries have negative impact on the lives of indigenous peoples in every session since it was created in 2002. See further note 6.

⁹ See Kristina Labba: “Mineral Activities on Sámi reindeer Grazing Land in Sweden”, pp. 93–95.

¹⁰ See Ruslan Garipov: “Extractive Industries and Indigenous Minority Peoples’ Rights in Russia”, pp. 67–75.

Code.¹¹ This causes great concern for the Sami and for other local communities in Sweden.

The traditional Sami areas in Norway have been subjected to several conflicts between mining activities and the traditional Sami livelihood.¹² Today, in particular, two controversial ongoing mining projects on Norwegian Sami territories are the root of heated debates: the Repparfjord/Ulveryggen-project by Nussir ASA¹³ and the Biedjovaggi-project by Arctic Gold AB.¹⁴ Neither of these projects is compatible with reindeer husbandry.¹⁵ Reindeer grazing are an area-demanding industry, and every part of the area covers different vital needs for the animals. Even loss of small areas may disturb the reindeer herding dramatically.¹⁶ Furthermore, Nussir ASA plans to use traditional coastal Sami fishing grounds to dispose of waste from the Reppar-

¹¹ Arne Müller: *Smutsiga miljarder – den svenska gruvboomens baksida*, (Dirty billions – the downside of Swedish mining), Skellefteå: Ord & visor förlag, 2013.

¹² See NOU 1997:4 *Naturgrunlaget for samisk kultur*, pp. 132–137.

¹³ See www.nussir.no for more information about their ongoing projects (last visited April 2014).

¹⁴ See www.arcticgold.se for more information about their ongoing projects (last visited April 2014).

¹⁵ See letter from Fylkesmannen (County administrator) in Finnmark to Miljøverndepartementet (The Ministry of the Environment) of 30 November 2012 available at www.nussir.no/environmental-pub/zoning/2012-11-30%20%20Fylkesmannen%20i%20Finnmark%20-%20brev%20til%20MD%20etter%20megling.pdf (Last visited April 2014), and Arctic Gold, Plandokument Biedjovaggi, (Plan for Local development plan Biedjovaggi) p. 110, available at [http://www.kautokeino.kommune.no/Finnmark/Kautokeino/kautokeinok.nsf/Attachments/0E9D080EB73F99BE412579C600364E4A/\\$FILE/Planprogram+-+revider+utgave+etter+offentlig+ettersyn+med+r%C3%B8d+tekst,+datert+07.02.12.pdf](http://www.kautokeino.kommune.no/Finnmark/Kautokeino/kautokeinok.nsf/Attachments/0E9D080EB73F99BE412579C600364E4A/$FILE/Planprogram+-+revider+utgave+etter+offentlig+ettersyn+med+r%C3%B8d+tekst,+datert+07.02.12.pdf) (last visited April 2014). See also Mikkel Nils Sara: “Land Usage and Siida Autonomy”, *Arctic Review on Law and Politics* 2011 p. 138–158.

¹⁶ See more Reindrifftsforvaltningen (Norwegian Reindeer Husbandry Administration) available at www.reindrifft.no/index.gan?id=298&subid=0 (last visited April 2014). See also Mikkel Nils Sara: “Land Usage and Siida Autonomy”, *Arctic Review on Law and Politics* 2011 p. 138–158.

fjord/Ulveryggen-project.¹⁷ This project raises debates about how this comply with Norway's obligations under international law pertaining to the rights of indigenous peoples and environmental law, to which I will return at the end of this section.

There is an increased interest in extractive industries, both mineral activities and oil and gas extraction in the North.¹⁸ The interest comes in response to the growing global demand for minerals, oil and gas.¹⁹ The Norwegian government is very interested in facilitating for extractive industries in the north of Norway.²⁰ This development causes particularly great concerns in traditional Sami areas in Norway where property rights are still unclear.²¹

Another concern is that it might be *de facto* unclear who is responsible for respecting indigenous peoples' rights and environmental obligations. States are seldom involved in extractive industries,²² which is instead performed by international companies. The extraction of resources, therefore, involves a three party-relationship among indigenous peoples, states, and extractive industry-companies. States are *de jure* obliged to "respect, protect and fulfill" the rights of indigenous peoples according to various hu-

man right instruments.²³ International companies have no such obligations, despite general public sentiment that the private sector should also respect, protect, and fulfill human rights, including the rights of indigenous peoples.²⁴ States are obliged to make sure that companies act in accordance with the current legislation. It follows from the U.N. Guiding Principles that: "State's protective role entails ensuring a regulatory framework that fully recognizes indigenous peoples' rights over lands and natural resources and other rights that may be affected by business activities."²⁵ However, in practice, no one is fully responsible for indigenous matters, as the state parties trust in corporate social responsibility.²⁶ A recent example from Norway is the already mentioned Repparfjord-case. The Ministry of Local Government and Modernisation adopted the needed local development plan for mining in the Repparfjord-area. Concerning the resistance from the affected reindeer-herding Sami peoples in the area, the Ministry states:

A basis for the decision is that the developer, in consultation with the reindeer-herding industry, agrees on mitigation measures that render possible the continuation of reindeer-husbandry and the practicing of Sami culture in the area.²⁷

¹⁷ www.nussir.no.

¹⁸ Asbjørn Eide: «Indigenous Self-Government in the Arctic and their Right to Land and Natural Resources», *The Yearbook of Polar Law*, Leiden/Boston: Martinus Nijhoff, 2009, p. 246–247.

¹⁹ *Pitfalls and Pipelines. Indigenous Peoples and Extractive Industries*, 2012, p. xv.

²⁰ Strategi for mineralnæringen (Strategy for the extractive industry), available at http://www.regjeringen.no/pages/38261985/mineralstrategi_20130313.pdf. (last visited April 2014).

²¹ Øyvind Ravna: "The First Investigation Report of the Norwegian Finnmark Commission", *International Journal on Minority and Group Rights* 2013, pp. 443–457.

²² *Pitfalls and pipelines. Indigenous Peoples and Extractive Industries*, 2012, unless the state has organized state owned companies, as Norway and Sweden have done with Statoil and LKAB.

²³ UN GUIDING PRINCIPLES ON BUSINESS & HUMAN RIGHTS: IMPLEMENTING THE UNITED NATIONS PROTECT, RESPECT, AND REMEDY FRAMEWORK, at 3, U.N. Doc. HR/PUB/11/04 (2011) [hereinafter Guiding Principles] available at http://www.ohchr.org/Documents/Publications/GuidingPrinciplesBusinessHR_EN.pdf. (last visited April 2014).

²⁴ See Guiding Principles p. 1–2.

²⁵ *Id* p. 2 and Forum on Bus. & Human Rights, Statement by Professor James Anaya Special Rapporteur on the Rights of Indigenous Peoples (Dec. 5, 2012). <http://unsr.jamesanaya.org/statements/forum-on-business-and-human-rights-2012-statement-by-professor-james-anaya>, (last visited April 2014).

²⁶ *Id*. See also *Pitfalls and Pipelines. Indigenous Peoples and Extractive Industries*, 2012, p. 345.

²⁷ The Ministry of Local Government and Modernisation decision (Kvalsund kommune – innsigelse til regulering-

In my opinion this is a clear example of “outsourcing” the responsibility for respecting the rights of indigenous peoples.

Another aspect of corporate social responsibility is respecting and protecting the environment.²⁸ Extractive industries in vulnerable arctic areas may adversely affect the environment. The “precautionary principle” expressed in several international instruments, such as the Convention on Biological Diversity (CBD),²⁹ the Convention for the Protection of the Marine Environment of the North-East Atlantic (OSPAR-convention),³⁰ and the Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter of 1972 (London Convention), with its 1996 Protocol (London Protocol),³¹ seems weak when competing with commercial mining industries.³² The core of the precautionary principle is reflected in Principle 15 of the Rio Declaration:

Where there are threats of serious or irreversible damage, lack of full scientific certainty shall not be used as a reason for post-

poning cost-effective measures to prevent environmental degradation.³³

Governments and mineral companies should take the time needed to discover all possible negative impacts and listen to environmental experts in this regard.³⁴ The abovementioned Repparfjord-project is a suitable case-study in this regard. The Norwegian Institute for Marine Research, The Directorate of Fisheries, and The Norwegian Environment Agency have warned against allowing Nussir ASA to spill poisonous copper-waste in the Repparfjord.³⁵ The warnings have not been heeded by the Norwegian government.³⁶ This puts Norway in company with the few countries worldwide that allow waste disposals from mining in the sea: the Philippines,

splan for Nussir og Ulveryggen) of 20th of March 2014, p. 7.

²⁸ For more about Corporate Social Responsibility (CSR), see William B. Werther, Jr. and David Chandler: *Strategic Corporate Social Responsibility: Stakeholders in a Global Environment*, Sage, USA, 2010, for instance p. 20.

²⁹ The Convention on Biological Diversity (CBD), 5 June 1992. The precautionary principle is expressed in the Preamble.

³⁰ The Convention for the Protection of the Marine Environment of the North-East Atlantic (OSPAR-convention) article 2 (2) a.

³¹ The Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter of 1972, (London Convention) 13 November 1972. See further Philippe Sands and Jacqueline Peel, with Adriana Fabra and Ruth MacKenzie: *Principles of International Environmental Law* (3rd ed.), 2012, page 563–564.

³² International Maritime Organization webpage: “Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter”, available at www.imo.org/OurWork/Environment/LCLP/Pages/default.aspx, (last visited April 2014).

³³ Rio Declaration on Environment and Development, Rio de Janeiro, 3–14 June 1992

³⁴ *Pitfalls and Pipelines. Indigenous Peoples and Extractive Industries*, 2012, chapter 1.1: Overview of impacts of Extractive Industries on Indigenous Peoples.

³⁵ See hearing submission from The Norwegian Institute for Marine Research, Havforskningsinstituttet “Høring – Reguleringsplan med konsekvensutredning for planlagt gruvedrift i Nussir og Ulveryggen i Kvalsund kommune”, 15 Sept. 2011, available at http://www.imr.no/filarkiv/2012/01/hi-rapp_23-2011_til_web.pdf/nb-no (last visited on April 2014) and statements from The Norwegian Environment Agency, Miljødirektoratet: “Fraråder utslippstillatelse i Repparfjorden” available at <http://www.miljodirektoratet.no/no/Nyheter/Nyheter/Nyhetsarkiv/2012/5/Frarader-utslippstillatelse-i-Repparfjorden/> (last visited April 2014), and Directorate of Fisheries: “Livet i fjorden i fare om vi tillet utslipp”, available at <http://www.fiskeridir.no/fiske-og-fangst/aktuelt/2012/1012/livet-i-fjorden-i-fare-om-vi-tillet-utslepp> (last visited April 2014).

³⁶ See the Ministry of Local Government and Modernisation decision (Kvalsund kommune – innsigelse til reguleringsplan for Nussir og Ulveryggen) of 20 March 2014, and the statement of the Ministry of Trade and Fishery (Kommentarer til innsigelsessak ifm reguleringsplan for gruvedrift på Nussir og Ulveryggen i Kvalsund kommune) of 13 February 2014, available at www.regjeringen.no/pages/38624159/Kommentarer_innsigelsessak_reguleringsplan.pdf (last visited April 2014). Note that mining in Repparfjord is still dependent on a discharge permit from the Norwegian Environment Agency.

Turkey, Indonesia and Papua New Guinea.³⁷ Mine waste into the sea releases fine particles into the ocean that may choke and drive away sea life and spreads, blanketing large areas of the sea floor.³⁸ Most countries, including China, the United States, Australia and Brazil, ban sea disposal of mining-waste. The London Protocol takes in its article 3 a precautionary approach to dumping as a general obligation. In essence, dumping is prohibited, except for materials on an approved list.³⁹ The London Convention and Protocol does not apply to internal waters, and is therefore not applicable for the Repparfjord-case in Norway, according to the London Convention article III (3). However, the general obligations regarding a precautionary approach in the OSPAR-convention article 2 (2) a, and also the United Nations Convention on the Law of the Sea article 210 applies to dumping also in internal waters. The fact that the most significant research communities in Norway have warned against dumping in Repparfjord can imply that Norway in this regard does not comply with the precautionary principle.

³⁷ *Pitfalls and pipelines. Indigenous Peoples and Extractive Industries*, 2012, p. 13 and Natur og ungdom: Sjødeponi i Repparfjorden ville ikke blitt tillatt i Kina, available at <http://nu.no/naturmangfold/sjoedeponi-i-repparfjorden-ville-ikke-blitt-tillatt-i-kina-article4167-230.html>. (last visited April 2014).

³⁸ *Pitfalls and pipelines. Indigenous Peoples and Extractive Industries*, 2012, p. 13 and Robert Moran, Amanda Preichelt-Brushett and Roy Young: "Out of Sight, out of Mine: Ocean Dumping of Mine Wastes", *World Watch* 22 (2) 2009.

³⁹ See more "The London Convention and Protocol. Their role and contribution to protection of the marine environment", available at www.imo.org (last visited April 2014).

3. The connection between indigenous peoples' rights and environmental law in this field

Why did the conference focus on both the rights of indigenous peoples *and* environmental law? An actual correspondence between indigenous use of natural resources and considerations behind the protection of the environment has been recognized in international law for a long time.⁴⁰ The UNEP annual Report from 2012 expresses that "Environmental sustainability and the promotion of human rights are increasingly intertwined goals and foundations for strengthening the three dimensions of sustainable development."⁴¹ Indigenous rights and environmental rights have also developed and intertwined in the international legal context, and the interaction between indigenous resource utilization and environmental protection has been a key aspect of environmental law conventions. International law recognizes that indigenous communities are dependent on the sustainable use of biological resources in their communities and recognize the importance of indigenous use to achieve the goal of sustainable development. The close relationship is expressed in several international instruments. I will elaborate on this in the following.

The Stockholm Declaration of 1972 stated in Principle 14 that indigenous peoples have the right to control their lands and their natural resources and to preserve their traditional way of life.⁴² The Brundtland Commission of 1987 clearly stated the relationship between indigenous interests and needs and the global interest in

⁴⁰ Anja Meyer: «International Environmental Law and Human Rights: Towards the Explicit Recognition of Traditional Knowledge», *RECIEL* 10 (1) 2001, p. 39.

⁴¹ United Nations Environment Programme (UNEP) Annual Report 2012, p. 56–57.

⁴² Stockholm Declaration on the Human Environment, adopted 16 June 1972, UN Doc. A/CONF.48/141 Rev.1 at 3 (1973) Principle 14.

conservation and the sustainable use of natural resources. The report highlighted in particular the need to respect indigenous peoples' decisions and decision-making bodies to ensure responsible resource utilization and conservation of the environment.⁴³ This was further specified at the Rio Conference in 1992, and is reflected both in the Rio Declaration on Environment and Development, Agenda 21 and the Convention on Biological Diversity. The Rio Declaration Principle 22 states:

Indigenous peoples and their communities and other local communities have a vital role in environmental management and development because of their knowledge and traditional practices. States should recognize and duly support their identity, culture and interests and enable their effective participation in the achievement of sustainable development.⁴⁴

Agenda 21 proposed several measures to achieve sustainable development.⁴⁵ It follows from chapter 26 that States shall establish arrangements to recognize the value of indigenous communities, indigenous traditional knowledge and traditional management of natural resources. In addition, chapter 17 about the management of marine resources is concerned with the interaction between indigenous utilization of resources and the principle of sustainable development.

Also the Convention on Biological Diversity (CBD) article 8 j) and the preamble call for state parties to pay adequate attention to indigenous

peoples' culture and traditional knowledge and practices relevant for sustainable use of biological diversity in the management of natural resources. States are required to have good processes for the use and protection of natural resources, ensuring indigenous peoples' participation in the management.

The UN Declaration on the Rights of Indigenous Peoples (UNDRIP) of 2007⁴⁶ is also based on the view that there is a close correlation between the indigenous exploitation of natural resources and the principle of sustainable development. This view is most clearly expressed in the preamble, which states that States recognize that "respect for indigenous knowledge, cultures and traditional practices contribute to sustainable and equitable development and proper management of the environment."

It is thus expressed that indigenous knowledge, culture and customary practices contribute to achieving sustainable and equitable development.

A recent expression of the connection between human rights, including the rights of indigenous peoples, and environmental law was made by the independent expert on the issue of human rights obligations relating to the enjoyment of a safe, clean, healthy and sustainable environment, John H. Knox.⁴⁷ He has, together with a number of scholars and lawyers, thoroughly researched human rights obligations relating to the environment.⁴⁸ This research was recently pub-

⁴³ Report of the World Commission on Environment and Development: Our Common Future. Transmitted to the General Assembly as an Annex to Development and International Co-operation: Environment. March 1987.

⁴⁴ Rio Declaration on Environment and Development, Rio de Janeiro, 3–14 June 1992, UN Doc. A/CONF.151/26 (Vol. I) article 22.

⁴⁵ United Nations Conference on Environment & Development, Rio de Janeiro 3–14 June 1992 AGENDA 21

⁴⁶ United Nations Declaration on the Rights of Indigenous Peoples, Resolution adopted by the General Assembly 13 September 2007, UN Doc. A/RES/61/295.

⁴⁷ Report of the Independent Expert on the issue of human rights obligations relating to the enjoyment of a safe, clean, healthy and sustainable environment, John H. Knox, A/HRC/25/53.

⁴⁸ *Id.* About the methodology he states: To ensure that the study was as thorough as possible, he sought and received substantial pro bono assistance from academics and international law firms. With their help, thousands of pages of material were reviewed, including texts of

lished in 14 different thematic reports.⁴⁹ Based on the findings in the research project, he concluded that human rights law includes procedural and substantive obligations relating to the environment.⁵⁰

Concerning international law on the rights of indigenous peoples, he highlighted five main points. These five state obligations are so clearly formulated that I chose to include them here:

Firstly, States have a duty to recognize the rights of indigenous peoples with respect to the territory that they have traditionally occupied, including the natural resources on which they rely. Secondly, States are obliged to facilitate the participation of indigenous peoples in decisions that concern them. The Special Rapporteur has stated that the general rule is that “extractive activities should not take place within the territories of indigenous peoples without their free, prior and informed consent,” subject only to narrowly defined exceptions (A/HRC/24/41, para. 27). Thirdly, before development activities on indigenous lands are allowed to proceed, States must provide for an assessment of the activities’ environmental impacts. Fourthly, States must guarantee that the indigenous community affected receives a reasonable benefit from any such development. Finally, States must provide access to remedies, including compensation, for harm caused by the activities.⁵¹

These obligations are based in a thorough study of international law.⁵² The ILO convention no. 169 concerning indigenous and tribal peoples in independent countries and UNDRIP specifically address the rights of indigenous peoples. Human rights bodies have also interpreted other international human rights agreements to protect these rights.⁵³ The abovementioned obligations are therefore interpretations that “have reached generally congruent conclusions.”⁵⁴

4. Final remarks

The world needs minerals, and it is not realistic to stop industrial development. But, the adverse environmental effects of extractive industries are a worldwide problem, and it is relevant to note that human consumption exceeds the earth’s capacity at a tremendous tempo. In only eight months, humanity exhausts the earth’s budget of resources for the whole year.⁵⁵ Indigenous peoples also need minerals. However, there is no need to hurry, as the mineral resources will not go anywhere. Traditional indigenous cultures, such as reindeer husbandry, are at stake and cannot be resurrected once erased. It is therefore necessary to clarify the rights of indigenous peoples, the potential adverse effects on such rights, and the environmental impact of extractive industries before anyone starts exploring and exploiting.

agreements, declarations and resolutions; statements by international organizations and States; and interpretations by tribunals and treaty bodies.”, A/HRC/25/53 p. 4.
⁴⁹ *Id.*

⁵⁰ Report of the Independent Expert on the issue of human rights obligations relating to the enjoyment of a safe, clean, healthy and sustainable environment, John H. Knox, A/HRC/25/53, page 21.

⁵¹ *Id.*

⁵² See note 44.

⁵³ Report of the Independent Expert on the issue of human rights obligations relating to the enjoyment of a safe, clean, healthy and sustainable environment, John H. Knox, A/HRC/25/53, page 20.

⁵⁴ *Id.*

⁵⁵ Global Footprint Network: “Earth overshoot Day 2013”, available at http://www.footprintnetwork.org/en/index.php/gfn/page/earth_overshoot_day/ (last visited April 2014)