This international journal has been created to encourage and develop the exchange of information and experience on all legal, administrative and policy matters relevant to the natural environment and sustainable development. It is concerned in the widest sense with legal and policy aspects of air, water, soil and noise pollution; the protection of flora and fauna; solid waste management; protected areas and land use control; and development and conservation of the world’s non-renewable resources.

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In a decade in which environmental policy efforts have seemed to attempt to bring every environmental issue under climate change’s rather ambiguous and non-concrete global umbrella, growing attention to plastics pollution and the impact of plastic waste on the environment at all levels is demonstrating the importance of maintaining awareness of reality rather than over-focusing on funding availability and publicity concerns.

Yes, environmental issues form a complex and entirely interconnected web; and yes, stressing the linkage between one’s own issue and the climate discussion is often a way to gain both public attention and a possible hand in what is perceived as a veritable “pot of gold” in the form of international funding for environmental projects on climate. Yet it is difficult not to see that internationally assisted progress in environmental protection, conservation, sustainability and restoration has languished during the ascendancy of the climate issue.

While it remains indisputable that climate change is an important environmental legal and policy issue, this should not be used as an excuse for not addressing any other or more specific environmental point. It is not clear that the global environment has benefited from the long “time-out” that has occurred as the world waits with bated breath for the global climate framework (in which every such point is inevitably included) to be ready, before it dares take concrete action.

It is thus with a feeling of relief that we have noticed the rise of public attention to the plastics issue. Certainly, indiscriminate dumping of trash is one of the oldest areas of public environmental action – easy for a population whose attention span and awareness/educational level have been eroded by the increasing presence of social media and their offspring: oversimplification and tunnel vision. In addition, trendy media memes have a new high-tech problem to bemoan and oversimplify: the impact of microplastics. This new attention comes in conjunction with one of EPL’s favourite occurrences – negotiation of an international instrument that is directly relevant to the issue. The harms caused by microplastics are of particular relevance to marine ecosystems, on which a new international instrument is in negotiations.

In this issue, we highlight new developments in these two areas. We anxiously look forward to the possibility of a return to meaningful contributions by international law and policy to real on-the-ground environmental concerns.

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In 1972, the United Nations General Assembly (UNGA) resolved to mark 5 June, the opening day of the Stockholm Conference on the Human Environment, as World Environment Day (WED).1 On the same day, another UNGA resolution established the United Nations Environment Programme (UNEP) and its Governing Council.2 This year’s WED celebration on 5 June 2018 came with a special focus on beating the menace of plastic pollution.3 India was the global host for WED 2018.

The global production and consumption of plastic has been on the rise, as the “ubiquitous workhorse material of the modern economy”.4 Plastics (synthetic or semi-synthetic organic compounds that are malleable) aren’t just one material but belong to a family of hundreds of different materials with a wide variety of properties.5 They are designed to meet the needs of each single application in the most efficient manner.

Currently, most plastics are derived from fossil fuel feedstock such as natural gas, oil or coal; although biopolymers are also being used. Some of the latter (such as polylactic acid) are biodegradable, although the most commonly used biopolymer materials (such as polyethylene derived from bioethanol) are not, as are the non-biologically originated materials.6 As a result, most plastics accumulate, rather than decomposing, in landfills or the natural environment.

According to a paper published in Science, more than 300 million tonnes of plastics are manufactured every year.7 India generates around 5.6 million tonnes of plastic waste annually. Delhi alone accounts for 9,600 metric tonnes per day. Over-reliance on single-use or disposable plastic has proven to be an environmental as well as human health hazard.

Marine Litter and Microplastics

Today, plastic debris or litter8 in the ocean is an environmental problem on a global scale. Microplastics – small particles or fragments of plastic measuring less than 5mm in diameter9 – have exacerbated both the problem and the challenge of response.

The transboundary movement of plastic marine litter and microplastics is becoming a major concern as the durability of plastics means that they remain intact for a long time and spread throughout the oceans. In fact, many tons of plastic debris (that can vary in size from large containers and fishing nets to microscopic plastic pellets or particles) are discarded every year, polluting lands, rivers, coasts, beaches and oceans.

It was revealed recently that single-use plastic has even reached the world’s deepest ocean trench when a plastic bag was found in the Mariana Trench situated at 10,898 m below the surface.10 A vast proportion of the fish in the sea are now believed to have plastic in them. They think it is food and eat it, just as seabirds feed plastic to their chicks. Some of this is released as excrement and ends up sinking on to the seabed. Eventually, it enters our food chain and, in time, our bodies. Akin to the menace of acid rain in 20th century Europe, the planet Earth is slowly being covered with plastic in the 21st century.

Initial Institutional Efforts

Strategies and Declarations Underscoring the Issue

In order to control the gradual increase in marine litter found on the sea, the sea floor and coastal shores, the Marine Debris Program, jointly run by UNEP and the US National Oceanic and Atmospheric Administration (NOAA), was instrumental in the adoption of a global framework for the prevention and management of marine debris, known as the Honolulu Strategy (2011).11 The Strategy was designed to serve as a:

framework for a comprehensive and global effort to reduce the ecological, human health, and economic impacts of marine debris. It is intended for use as a planning tool, common frame of reference for collaboration, and a monitoring tool on multiple levels – global, regional, national, and local – involving the full spectrum of civil society, government and intergovernmental organizations, and the private sector.

Given that multiple causes and factors contribute in determining the nature, quantity and distribution of debris around the world, the 2011 Strategy sought to earmark a “template for global efforts addressing the problem of marine debris”.12 Following the adoption of the Honolulu Strategy, in 2012, representatives of 64
Governments and the European Commission, acting under the auspices of UNEP, sought to give a further push to global regulatory efforts by adopting the Manila Declaration on furthering the Global Programme of Action for the Protection of the Marine Environment from Land-based Activities. Its Global Programme of Action identified land-based marine litter as a priority area for the period 2012–2016 at the international, regional and national levels. Following the recommendations of the Manila Declaration, the Global Partnership on Marine Litter was launched at the Rio+20 Summit (2012). It is a global partnership gathering together international agencies, governments, non-governmental organisations, academia, the private sector, civil society and individuals. It primarily seeks to protect human health and the global environment by the reduction and management of marine litter as well as giving impetus to the implementation of the 2011 Honolulu Strategy.

Addressing Plastics as Hazardous Waste

Basel Convention

Multilateral environmental agreements have emerged as a potent tool used by sovereign States to address global environmental problems. In fact, there seems to be a growing tendency among States to push for global agreements, especially to regulate sectoral environmental problems. Over the past four decades, a gradually thickening web of multilateral environmental regulatory tools has been developing, embodying a law-making approach that has resulted in a flurry of global environmental instruments, each adopted to deal with a specific issue. Concerning the challenge of plastic wastes, the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal is the most comprehensive global environmental treaty that regulates hazardous and other wastes. Its overarching objective is to protect human health and the environment from the adverse effects of hazardous and other wastes (including household wastes). Some plastics are listed as “hazardous wastes” under the Convention and many household wastes may include plastics. In fact, under the umbrella of the Basel Convention, several aspects such as “minimization of the generation of wastes, their environmentally sound management as well as the control of their transboundary movement” could apply to plastics.

The sixth Conference of Parties (COP) meeting of the Basel Convention (2002) adopted the technical guidelines for the identification and environmentally sound management of plastic wastes and for their disposal. In the main, the COP’s decisions and approach sought to focus on technical aspects of the management of plastic wastes, with particular emphasis on their recycling. However, the volume of household wastes in many countries is growing. Their origin, composition and characteristics give an indication that they may contain hazardous materials mixed with non-hazardous materials. More recently, in order to understand the problem as well as to work out a proper plan for environmentally sound management of household wastes, the Basel Convention Parties set up an informal group, which has proposed, inter alia, the establishment of a Household Waste Partnership. A COP-13 decision specifically included a mandate to consider relevant options for addressing marine plastic litter and microplastics in the work programme of the Open-ended Working Group for the biennium 2018–19.

UN Sustainable Development Summit

The UN Sustainable Development Summit, held in New York in 2015, became an epoch-making event when it finally adopted a blueprint built around a set of 17 sustainable development goals (SDGs), to be addressed in a 15-year cycle. The SDGs were essentially designed as a sequel to the millennium development goals adopted at the UN Millennium Summit in 2000. The UNGA indicated that the SDGs are to be realised in an “incremental, persuasive and leisurely way” to serve as the plan of action for a renewed quest to promote the global development of people, planet, prosperity, peace and partnership. The goals expressed in the SDGs include addressing challenges as diverse as inequality in living standards, infrastructure, water and sanitation, empowerment of women, access to modern energy, quality education, healthy lives, poverty and hunger. SDG-14 explicitly aims to “prevent and significantly reduce marine pollution of all kinds, in particular from land-based activities, including marine debris and nutrient pollution.”

UNEP

In 2016, seeking to contribute to the attainment of the SDG 14, the UN Environment Assembly (UNEA) adopted Resolution 2/11 (2016) on marine litter and microplastics. As a corollary, in December 2017, it called all actors to step up actions, by 2025, to “prevent and significantly reduce marine pollution of all kinds, in particular from land-based activities, including marine debris and nutrient pollution.” It established an Ad Hoc Open-Ended Expert Group on Marine Litter and Microplastics, which will undertake a comprehensive study of all barriers to combating marine litter and microplastics, including challenges related to resources in developing countries, and has a mandate to identify national, regional and international response options to combat marine litter and microplastics. The first AOEG meeting was held in May 2018 where it examined measures such as upstream management, integrated waste management, improved product labelling, also considering the adverse effect of fossil fuel subsidies on recycling efforts.

UNEP also launched the UN Clean Seas Campaign in January 2017 in an attempt to increase global awareness of the need to reduce marine litter. In view of the wide variety of purposes for which plastics have come to assume centre stage, the approaches and efficacy of measures to combat plastics differ in different parts of the world. It is reflected in a lack of proper waste management infrastructure in some areas, while in others...
the challenge remains as to how to engage the general public’s awareness of the impact plastic litter has on the environment.

The Need to Make Choices

It is indeed a matter of serious concern that no part of the planet is free from the scourge of plastic wastes. Many countries are saddled with mountains of water containers, supermarket bags, polystyrene lumps, compact discs, cigarette filter tips, nylons and other plastics. Some are in the form of microscopic grains, others in lumps. The impact is often highly damaging. Even the polar regions, generally considered to be pristine zones, are now getting affected by plastics as is the case with mountain areas and rivers where tourists and rafters leave a trail of plastics behind, even on Mount Everest.

In this context, the 2018 WED theme of “Beat Plastic Pollution” is a robust call for action to combat one of the greatest environmental challenges of our times. The theme invites all to consider how to make changes to reduce the heavy burden of plastic pollution on our natural places, wildlife and human health. It challenges us to make simple yet informed choices (e.g., carrying reusable shopping bags, coffee mugs, water bottles, etc.) and to support innovative measures, as exemplified by a canal tour company in Amsterdam which has initiated a campaign called “Plastic Fishing”, which engages tourists as volunteers to catch floating plastic in fishing nets. In another example, there is an age-old tradition in West Bengal, India of using small cups made of clay (bhars) that serves as a natural alternative to disposable paper or plastic cups.

Having been the global host for 2018 WED, India now needs to lead the way by making concerted efforts to clean its rivers and beaches cluttered with piles of plastic. Its Plastic Waste Management Rules 2016 are a useful contribution to these efforts. Section 5 of the Rules talks about plastic waste management:

(a) plastic waste, which can be recycled, shall be channelized to registered plastic waste recyclers and recycling of plastic shall conform to the Indian Standard: IS 14534:1998 titled as Guidelines for Recycling of Plastics, as amended from time to time; (b) local bodies shall encourage the use of plastic waste (preferably the plastic waste which cannot be further recycled) for road construction as per Indian Road Congress guidelines or energy recovery or waste to oil etc. The standards and pollution control norms specified by the prescribed authority for these technologies shall be complied with; (c) Thermo set plastic waste shall be processed and disposed off as per the guidelines issued from time to time by the Central Pollution Control Board; and (d) The inert from recycling or processing facilities of plastic waste shall be disposed of in compliance with the Solid Waste Management Rules, 2000 or as amended from time to time.

A recent decision by the National Green Tribunal banning the use of plastic bags of less than 50 microns also shows that modest legal measures are underway. However, their success will depend upon corresponding changes in societal attitudes and habits.

A New “Common Concern”? 

Banning plastic products is not the solution as plastic plays an important role in the daily lives of people and the economy. It performs multiple functions that can help in taking care of a number of societal challenges in many countries especially those with emerging economies. Light and innovative materials in cars or planes could save fuel and cut CO2 emissions. In packaging, plastics help ensure food safety and reduce food waste. Combined with 3D printing, bio-compatible plastic materials can save human lives by enabling medical innovation. However, the problem lies in the way plastics are currently produced, used and discarded.

A Circular Economy

As a response to the challenge posed by plastics, the concept of a “circular economy” is now gaining credence as a potential way for societies to increase prosperity, while reducing demands on finite raw materials and minimising negative externalities. On 16 January 2018, the European Union (EU) adopted an ambitious European Strategy for Plastics in a Circular Economy (2018) that seeks to transform the way plastic products are designed, used, produced and recycled. It sets 2030 as a target when all plastics packaging found on the EU market is either reusable or can be recycled in a cost-effective manner. The EU 2015 Circular Economy Action Plan also sought to highlight action on plastics as a priority to help European businesses and consumers use resources in a more sustainable way.

Emphasising Re-use

The mantra of “if you can’t reuse it, refuse it” provides a practical approach to combating the plastics menace. It calls for active engagement from governments, the public, civil society and the private sector in the fight against plastic pollution. One hopes that wiser counsels will prevail to save us from the frightening prospects that if no action is taken, by 2050, there could be more plastics than fish in the oceans! The time has come to address the simmering challenge of plastics pollution as one of the “common concerns of humankind” together with climate change, loss of biological diversity and desertification. The concerted norm-setting processes currently underway would need to swiftly crystallise in the form of a legally binding multilateral treaty as an institutionalised global response to face the challenge of plastics pollution.

Notes

1 The UN General Assembly Resolution 2994 (XXVII) of 15 December 1972 (Doc. A/RES/27/2994) resolved as follows: “Designates the 5 June as World Environment Day and urges Governments and the organizations in the United Nations system to undertake on that day every year world-wide activities reaffirming their concern for the preservation and enhancement of the environment, with a view to deepening environmental awareness and to pursuing the determination expressed at the Conference”; available at http://www.un-documents.net/a27r2994.htm.

3 For this global campaign to “Beat Plastic Pollution”, UNEP has launched a special drive to highlight the gravity of the situation; see https://worldenvironmentday.global.


6 Thompson et al. note that “[t]here is a popular misconception that degradable and biodegradable polymers offer solutions to the problems of plastic debris and the associated environmental hazards that result from littering. However, most of these materials are unlikely to degrade quickly in natural habitats, and there is concern that degradable, oil-based polymers could merely disintegrate into small pieces that are not in themselves any more degradable than conventional plastic”; see Thompson, R.C., More, C.J., vom Saal, F.S. and Swan, S.H. 2009. “Plastics, the environment and human health: Current consensus and future trends”. Philosophical Transactions of the Royal Society B 364: 2153–2166, at 2161.


8 Marine litter/debris is defined as “any anthropogenic, manufactured, or processed solid material (regardless of size) discarded, disposed of, or abandoned in the environment, including all materials discarded into the sea, on the shore, or brought indirectly to the sea by rivers, sewage, stormwater, waves, or winds”; see UNEP/NOAA. 2011. “The Honolulu Strategy: A global framework for prevention and management of marine debris”, at 3. Available at https://marinedebris.noaa.gov/honolulu-strategy.


11 Supra, note 8.

12 Ibid.


17 The issue of marine plastic litter and microplastics has been included in the implementation of the Basel Convention; see http://www.basel.int/Implementation/MarinePlasticLitterandMicroplastics/Overview.


21 Ibid.


27 Ibid., at 4, para. 10.

28 For discussion on the first meeting of the Group, see https://papersmart.un.org/resolution/uploads/draft_co_chairs_summary_31may2018_11am.pdf [Legal needed. Ed.]

29 See http://www.cleanseas.org/.

30 The Supreme Court of India recently reprimanded the Delhi administration over “mountains of garbage” at its landfill sites; see https://timesofindia.indiatimes.com/india/sc-says-delhi-under-mountains-of-garbage-slams-lg-for-inaction/articleshow/64961164.cms.


34 In its order dated 10 August 2017, the National Green Tribunal categorically referred to “the carry bag of thickness less that 50 microns which are being used in the market and it is one of the principal ingredients of environment hazards in Delhi”; available at http://www.indiainvironmentportal.org.in/files/plastic%20pollution%20NGT%20Order%20Delhi.pdf.


The Proposed Global Pact for the Environment: A Framework for Consistent Realisation of the Sustainable Development Goals

by Teresa Parejo-Navajas

Since the adoption of the Charter of the United Nations in 1945, one of the UN’s main purposes has been cooperation:

To achieve international cooperation in solving international problems of an economic, social, cultural, or humanitarian character, and in promoting and encouraging respect for human rights and for fundamental freedoms for all without distinction as to race, sex, language, or religion.1

The term “sustainable development” was first coined in an environmental context by the Club of Rome, then by the International Union for Conservation of Nature (IUCN), and then, famously, in 1987, used in the report entitled Our Common Future issued by the “Brundtland Commission” – UN World Commission on Environment and Development. Thanks to this concept, the environment was added to the main concerns of the UN and, hence, to the international political discourse. Sustainability entails the integration of the environment into all development strategies and within all countries, not just the underdeveloped ones.2 It was described in the Brundtland Report as a key action: “Humanity has the ability to make development sustainable, to ensure that it meets the needs of the present without compromising the ability of future generations to meet their own needs”.3 This idea lies at the foundation of the 17 Sustainable Development Goals (SDGs) adopted by the UN General Assembly (UNGA) on 25 September 2015, as part of its 2030 Agenda for Sustainable Development,4 with the goals of “end[ing] poverty, protect[ing] the planet and ensur[ing] prosperity for all”.5

The concept of sustainability is also present in the initiative to develop a Global Pact for the Environment (GPE). The GPE is currently set to begin negotiations.6 It is proposed to enunciate an obligation of the States to “ensure the promotion of public support policies, patterns of production and consumption both sustainable and respectful with the environment”.7 This formulation would mean that the environment is an inherent element of the SDGs, and not just a corrective force.

The GPE’s connection with the UN human rights legal framework justifies the view that it will be an essential element of that framework. As a result, States participating in the pact will have the duty to incorporate the environment into their respective and varying public policies.

Such public policies, geared towards the protection of the environment, are already a precondition for the effective realisation of an individual’s right to a healthy environment – this right could not be effective if it had not been previously established in a collective way. Hence the legal right to the environment works in two directions: it is an individual right that creates obligations for the States to define the necessary conditions for its effective realisation (a healthy environment). But it also works the other way around: the objective duty of the States to protect the environment, necessarily drives the State to mandate and enforce protection of that healthy environment.

Any international agreement clearly requires international cooperation, if it is to be successfully put into practice.8 This necessity is exemplified by the 2030 Agenda and the SDGs, which have overcome the first hurdle, by receiving unanimous approval from the UN Member States.9 However, the SDGs are practical and contain 169 targets that need to be achieved at a national level. This is the next hurdle – achieving these targets is a challenge to be accomplished by 2030.

The GPE process represents a reversal of the normal evolution/diffusion of international legal concepts, in that the right to a healthy environment is well consolidated at the domestic level in many countries.10 It is also an underlying element of the SDGs. Now it serves as a cornerstone of the proposed GPE. Despite the success of global environmental governance over the years,11 however, there is not yet an overall legal instrument that would codify a “globally accepted substantive human right to a good or clean and healthy environment”.12

In this regard, the GPE initiative, in its current incarnation,13 aims at unifying and reinforcing existing environmental law and principles by formally recognising an individual right to a healthy environment at the international level, thereby completing the existing international human rights governance. As stated by Professor John Knox, Special Rapporteur on the issue of human rights obligations, relating to the enjoyment of a safe, clean, healthy and sustainable environment:

*a safe, healthy and sustainable environment is necessary for the full enjoyment of a vast range of human rights, including the right to life, health, food, water and development. At the same time, the exercise of human rights, including the rights to information, participation and remedy, is vital to the protection of the environment*.14

International and domestic levels of cooperation, each serving their own specific strategic objectives, are

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1 Associate Professor of Law, Carlos III de Madrid University, Spain; Senior Advisor to the UN Sustainable Development Solutions Network, New York.
necessarily interconnected: “Achieving goals at one level depends on enabling factors at the other”. Therefore, given the natural connection between the SDGs and the right to a healthy environment, the conclusion of the GPE will contribute to the success in SDG implementation at the domestic level, while at the same time, those goals will help consolidate the right to a healthy environment at the international level. The GPE will provide a tool that will help implement the SDGs with greater consistency.

This paper will briefly describe currently available legal protection of the environment at the national and international levels; the link between the environment and the SDGs, and what the GPE will contribute to the implementation of the SDGs.

Existing Legal Protection of the Right to a Healthy Environment

Although today, the link between human rights and the environment is clear, it has not always been so evident, from a legal and academic perspective. None of the original statements of human rights obligations specifically encompasses the right of the enjoyment of a “safe, clean, healthy and sustainable environment”, even though such a right affects all aspects of people’s lives. This is because the environmental movement started after the adoption of the UN Declaration of Human Rights and the two international Covenants, both from 1966, that recognised the protection of economic, social and cultural rights, and of civil and political rights, respectively.

Since the adoption of the Universal Declaration of Human Rights in 1948, the UN has insisted that those rights must be protected by means of the rule of law. Thus, it is clear that postulating a global environmental right is not enough – it must be protected by law.

Current economic inequalities contribute to the rise in the world’s health and social problems in both rich and poor countries, with serious consequences for the protection of the environment. Environmental degradation is associated with social and economic deprivation and with serious health challenges, perpetuating these economic and social inequalities. Various reports from Special Rapporteur Knox show that human rights and the environment are interdependent: a healthy environment is necessary for the enjoyment of a full life, and the exercise of human rights is inherent to a healthy environment.

While most countries and regional legal instruments have adopted some kind of legal instrument to recognise and protect the right to a healthy environment, the international legal system has fallen behind. Many have rushed to fill in the gaps with human rights law, interpreting recognised human rights as also protecting the environment. In order to set obligations among States, the recognition of a right should be first established. And this is the real contribution of the GPE and the benefit it brings to the implementation of the SDGs.

The Evolution of International Legal Protection of the Environment

At the international level, protection of the environment has been fragmented, resulting in a sectoral approach that can be described as insufficient or insufficiently ambitious, given the current state of the planet.

The link between the environment and human rights goes back to 1972, with the Stockholm Declaration of the UN Conference on the Human Environment, followed 20 years later by the Rio Declaration on Environment and Development. In the Stockholm Declaration, the right to a healthy environment was formally acknowledged for the first time, conferring it universal value as a moral standard commonly accepted by all nations around the world. Thereafter, the effort to define an environmental legal framework culminated in the Rio Declaration, in 1992. Since then, that effort has evolved sectorally, as the international community has started to approach environmental issues with a series of resolutions related to toxic and dangerous products and waste. This led to the adoption of the first Resolution on “Human Rights and the Environment”, in 1994, and marked the beginning of a series of subsequent resolutions with this title. However, the Commission wasted an opportunity in 1995 to recognise the right to a healthy environment, and it was also not mentioned during the global conferences on sustainable development in Johannesburg and Rio. The “human rights and environment” topic was again linked to sustainable development at the World Summit on Sustainable Development in Johannesburg in 2002 and in a range of Commission resolutions thereafter. The Human Rights Council was formally created in 2006, taking over the role and responsibilities of the Commission on Human Rights, including those “relating to the work of the Office of the United Nations High Commissioner for Human Rights (HCHR), which had been established in 1993”. In line with this, in 2011, the Council adopted a thorough study by the UNHCHR on the relationship between human rights and the environment, which also formally considered the views of UN State Members, relevant international organisations and intergovernmental bodies. That analysis expressed three conclusions:

a) sustainable development and the protection of the environment can contribute to human wellbeing and the enjoyment of human rights;

b) environmental damage can have negative implications, both direct and indirect, for the effective enjoyment of human rights; and

c) human rights obligations and commitments have the potential to inform and strengthen international, regional and national policy making in the area of environmental protection.
Building on the above described resolutions and analysis, in March 2012, the Human Rights Council appointed its first Independent Expert on Human Rights and the Environment,36 a position filled by the appointment of John Knox. In 2015, the Council extended this appointment for three additional years, re-designating him as a “Special Rapporteur” on the topic.37 In his first report, of March 2013, Knox stressed the interdependence of human rights and the environment.38 Accompanying his report, he conducted research around the world to identify the different human rights obligations relating to the environment covered by regulatory bodies and jurisprudence around the world and concluded that, despite their diversity, the approach to the issue was very coherent.39 The Special Rapporteur also identified and described good practices in the use of obligations under human rights law to protect the environment, in his following report, presented in March 2015.40 After this mandate was renewed, he submitted various other reports on specific aspects of the relationship between human rights obligations and the enjoyment of a safe, clean, healthy and sustainable environment, specifically, on climate change and human rights, on biodiversity and human rights, and on children’s rights and the environment.41 In conjunction with his March 2016 report, he submitted a second report which included recommendations on the implementation of the human rights obligations with respect to the environment, identifying the main challenges and barriers to their full satisfaction,42 and in another one elaborated in October 2017, some draft guidelines to spread guidance on the main norms on the issue, which finally led to the publication, in January 2018, of the Framework principles on human rights and the environment,43 which provides detailed guidance for their implementation, and a foundation for their further development.

Proposal of a Global Pact for the Environment

In 2015, building on previous attempts to codify a right to a healthy environment, the environmental commission of the French think tank Le Club des Juristes, chaired by Yann Aguila, proposed the adoption of a Global Pact for the Environment. This initiative gained a very important boost thanks to support from President Macron and from Laurent Fabius, who had served as President of the 21st Conference of the Parties to the UN Framework Convention on Climate Change (UNFCCC) and the Paris Climate Negotiations. The Club’s draft text, as submitted to the UNGA in September 2017, proposed to give “greater coherence to international environmental laws, and set out clear obligations for States and individuals to protect the environment”.44 It sought to bring the existing agreed environmental principles together in a single text that would complete the human rights legal system. It included 26 short articles with the aim to effectively tackle the environmental threats we face, including climate change and the loss of biodiversity, the eradication of poverty, the growth of inequalities and the situation of the most vulnerable, with a clear determination to promote a sustainable development that would allow each generation to fulfil their needs without compromising those of the following ones and respecting the balance and equilibrium of the Earth’s natural system.

In May 2018, the UNGA adopted a resolution45 calling for the commencement of negotiation of a Global Pact for the Environment. As a first step, the Resolution requested the Secretary-General “to submit to the General Assembly at its seventy-third session in 2018 a technical and evidence-based report that identifies and assesses possible gaps in international environmental law and environment-related instruments with a view to strengthening their implementation”. Thereafter, a new draft is to be elaborated and discussed during the following years, hopefully resulting in a Global Pact.

In short, after more than 50 years of debate and consideration, the relationship between human rights and the environment is clear, but the UNGA has recognised that international governance still lacks a legal instrument which enunciates the right to a healthy environment, leaving the human rights system incomplete. The GPE represents a step forward in this respect.

Regional and National Expression of a Right to a Healthy Environment

As noted, the international environmental governance framework has developed through sectoral treaties on specific issues. This method has led to a situation in which there are different types and levels of environmental protection among countries. The draft GPE proposes a rights-based approach that would add legal certainty while preserving the system’s flexibility – allowing it to adjust to the evolution of the environmental challenges and of scientifically sound solutions. A rights-based approach to the environment46 would require all public and private institutions to incorporate environmental rights considerations into plans, policies and processes, based on the rights and obligations set by international law.47 The formal recognition of a right to a healthy environment would, therefore, strengthen the international protection of the environment, and would provide the necessary human rights language for the cohesive realisation of the SDGs.48 At the regional and national levels, environmental law and policy have accomplished
much, but they have still not achieved the levels of success seen in the processes that resulted in the protection of the first and second generation of human rights, the civil and political rights, and, for example, the economic, social and cultural rights, protected under the two legally binding covenants of 1966.49

At the regional level, there are three treaties that explicitly enumerate a “right to a healthy environment”. They address the human right to the environment as follows:

i) The African (Banjul) Charter on Human and People’s Rights: “All peoples shall have the right to a general satisfactory environment favorable to their development”.50

ii) the San Salvador Protocol, 1988: “1. Everyone shall have the right to live in a healthy environment and to have access to basic public services. 2. The States Parties shall promote the protection, preservation, and improvement of the environment”;51 and

iii) the (UNECE) Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters: “Recalling principle 1 of the Stockholm Declaration on the Human Environment… Recognizing also that every person has the right to live in an environment adequate to his or her health and well-being, and the duty, both individually and in association with others, to protect and improve the environment for the benefit of present and future generations”.52

Surprisingly, in Europe, neither the European Convention for the Protection of Human Rights and Fundamental Freedoms53 nor the Charter of Fundamental Rights of the European Union54 specifically identify a human right to a healthy and safe environment. As to the latter, Article 37 of the Charter of Fundamental Rights does state that “[a] high level of environmental protection and the improvement of the quality of the environment must be integrated into the policies of the Union and ensured in accordance with the principle of sustainable development”, but does not undertake any evaluation of an individual right to a healthy environment.

The European Social Charter contains a paragraph that refers to the interpretation of the scope of the provisions of the Charter, in the sense that “(m)easures should be introduced to prevent activities that are damaging to health, such as smoking, alcohol and drugs, and to develop a sense of individual responsibility, including such aspects as a healthy diet, sex education and the environment”.55

At the national level, as of 2012, a total of 177 of the 193 UN Members recognise the right to environmental quality through constitutional provision, legislation, judicial precedent, or international agreement,56 with more than 100 recognising the right explicitly in legislation or constitutions.57 There is a clear trend towards the recognition of a right to a healthy environment in the national and regional courts. In the first such case,58 the High Court of Ireland recognised “a personal constitutional right to an environment”.59 In the second, the Inter-American Court on Human Rights issued an Advisory Opinion recognising the right to a healthy environment as fundamental to human existence.60 Both appear to consider the right to a healthy environment as an individual human right that needs to be protected and enforced at the national and the international levels.

Additional evidence of this trend may be found in the “Brasilia Declaration on Water Justice”, recently endorsed during the 8th World Water Forum. Issued by “the judges who administer water justice and adjudicate cases regarding the utilization, management and protection of all forms of freshwater resources; equitable access to water and sanitation services; the impact of human activities on water and the environment; and restoration of ecological services and functions”, this declaration reaffirmed the values and principles enshrined in all the previous environmental declarations, including, for the first time, those incorporated in the draft of the GPE.61

Mainstreaming Across the Sustainable Development Goals

The SDGs, described above, are a “universal call to action to end poverty, protect the planet and ensure that all people enjoy peace and prosperity”62 as part of the 2030 Sustainable Development Agenda. Experts have alleged, however, that their main failure is that they avoid any rights-oriented language.63 The SDGs are, at any rate, a guide for governments in their policy development and, despite their flaws, they are of substantial importance to the achievement of sustainable development in general, and to the improvement of the connection between human rights and the environment, in particular.64 They provide a solid foundation for the definition of the necessary policies for current world challenges, including the environmental ones.

Most States around the world recognise substantive and/or procedural rights related to the protection of the environment; rights that necessarily entail a subsequent duty of care.65 Substantively, in the domestic sphere, these obligations stem from legislation and jurisprudence (the latter having produced more uneven results). States have a duty to adopt and implement legal frameworks to protect against environmental harm that may affect human rights, in particular, those of the most vulnerable. Internationally, they arise from the implicit recognition of the right to a healthy environment derived from the protection of other human rights.66

Procedural obligations relate to access to environmental information, and public participation in environmental decision-making processes supporting the substantive obligations (i.e., the recognition of the environmental human right). The levels of protection vary among States as these obligations (particularly the substantive ones) must be tempered with States’ acknowledged “right to development”.67 Thus, even if one assumes the existence of an obligation of States to avoid environmental harms and protect human rights in a non-regressive fashion, there is still ample scope to strengthen the implementation of international environmental law. In this connection,
transboundary environmental damages have proven particularly contentious, whether because they are not contemplated in most international human rights agreements or due to the fact that the existing references are rather inconsistent and therefore create legal uncertainty.

The eradication of poverty and reversal of the increase in social, economic and environmental inequalities, are indispensable requirements to achieve sustainable development in its three dimensions (economic, social and environmental) – an on-going process that builds upon the unfinished business of the millennium development goals.68

Conclusion

Following the adoption of the UN Declaration on Human Rights, 1948, the Human Rights Commission was asked to create a human rights body of law with legally binding force. In 1966, the UNGA adopted two international covenants on human rights in response to that mandate. At that point in history, there was not yet political interest in the legal aspects of environmental matters. Consequently, environmental rights were not included in these efforts. Today, the GPE offers a framework for that generation of rights, gathering all existing environmental principles in a single document that would serve as the cornerstone of the international environmental legal order. The GPE supplements the existing human rights legal system incorporating the environment, as one of the three pillars of sustainability – the only element that has been lacking in the human rights approach.

The GPE would complete the sustainability system by adding the environment to the economic and social spheres of the human-rights-protection legal order and by giving more consistency to the SDGs and, hence, to the framework that would guide the action of the States towards a fairer and more sustainable world.

Its critical contributions would be manifold. It would be set in the UN human rights global framework of universal rights and global obligations for the States. As such, it would complement the right to a healthy environment, enhancing that right in two ways: enunciating both an obligation that States create the necessary conditions for the effective realisation of an individual right to a healthy environment, and, conversely, a duty of the States to set an objective policy to protect the environment.

The SDGs provide a guideline to promote human rights obligations among States to improve the lives of the people in a sustainable way. Recognition of these responsibilities guarantees the effectiveness of the individual right to a healthy environment. Thus, the GPE would also complete the SDG framework, making it more robust and coherent in order to guide the public policies of States towards a fairer and more sustainable world.

Notes

3 Ibid., at 41.
5 Ibid.
7 Article 3, draft of the Global Pact for the Environment, as it was presented in Paris in June 2017.
10 Among the 192 nations that are UN Members, the right to a healthy environment was explicitly recognised in the constitutions of 90 of them. In at least 12 other countries, Supreme or Constitutional Courts have ruled in favour of an implicit constitutional right to environmental health. Boyd, D. 2011. “Constitutional Right to a Healthy Environment”. RECIEL 20(2): 171–179.
13 From an idea floated by Amadeo Postiglione, to the IUCN draft, various attempts have sought to promote such a Pact (or something similar). Ibid.
15 Supra, note 5, at 1.
16 Ibid., at 2.
17 Brief summary and various UNEP sources on this topic are online at http://web.unep.org/diversions/divel-human-rights-and-environment.
18 Supra, note 14.
29 See, for example, the following websites, as sources of examples of international sectoral agreements: UN Division for Ocean Affairs and Law of the
48. One of the main criticisms levelled at the SDGs is their failure to use the standard human rights terminology that would have enhanced their accountability.


55. The Europen Social Charter: Collected texts (7th edition), updated 1 January 2015, at 240. Online at https://rm.coe.int/168048b059. In addition to the citation in the text, at Article 11 (“Right to protection of health”), it notes that:

“...With a view to ensuring the effective exercise of the right to protection of health, the Contracting Parties undertake, either directly or in co-operation with public or private organisations, to take appropriate measures designed inter alia:

1. to remove as far as possible the causes of ill-health; 2. to provide advisory and educational facilities for the promotion of health and the encouragement of individual responsibility in matters of health; 3. to prevent as far as possible epidemic, endemic and other diseases...”

It cites the “Declarations of the United Nations Stockholm (1972) and Rio de Janeiro (1992) environment conferences” as well as the UNFCCC and Kyoto Protocol among the “Selected international instruments in the same field” as this provision (at 268).


57. Ibid. note 10.


64. Ibid., note 19.


66. Supra, note 24.

In September 2000, the UN Millennium Declaration was adopted by world leaders at United Nations Headquarters in New York. The Millennium Goals therein agreed to aim at reducing extreme poverty and set out a series of time-bound targets in poor countries. They were replaced, in 2015, by the Sustainable Development Goals, geared towards all countries in the world. See http://www.un.org/millenniumgoals/bkgd.shtml.

The conservation and sustainable use of marine biodiversity in areas beyond national jurisdiction is increasingly attracting international attention. Scientific information, albeit insufficient, reveals the richness and vulnerability of these resources; while at the same time concerns grow about the increasing anthropogenic pressures posed by activities such as fishing, deep-sea mining, marine pollution, and marine bioprospecting.

If left unaddressed, such activities will lead to a destructive cycle in which oceans will no longer be able to provide many services on which life on this planet depends. Oceans and seas moderate global climate conditions; maintain the earth’s ecosystems; and support the livelihoods of more than three billion people. Sustainable oceans and seas can contribute to poverty eradication, economic growth, food security and creation of livelihoods, while helping to build resilience to the impacts of climate change. Thus, it is critical to develop a binding treaty aiming at the conservation and sustainable use of marine biological resources, as soon as possible.

Background of the Negotiations

These negotiations found their origins as far back as 2004, when UN General Assembly (UNGA) Resolution 59/24 established an Ad Hoc Open-ended Informal Working Group to study issues relating to the conservation and sustainable use of biodiversity in areas beyond national jurisdiction. In 2011, the Working Group adopted a set of recommendations to initiate the process of developing a legal framework on this issue. It identified gaps and ways forward, and exchanged views on the implementation of existing instruments and the possible development of a multilateral agreement under the UN Convention on the Law of the Sea (UNCLOS). Among its recommendations, the Group identified a “package” of four sets of issues that it felt needed to be addressed collectively:

- marine genetic resources (MGRs), including access and benefit sharing;
- area-based management tools, including marine protected areas (MPAs);
- environmental impact assessments (EIAs) and other such measures, and
- capacity building and transfer of marine technology.

In subsequent meetings, these categories are generally collectively referred to as “the package”.

In 2015, UNGA Resolution 69/292 established a Preparatory Committee (PrepCom), mandated to provide substantive recommendations on the elements of a draft text of an International Legally Binding Instrument (ILBI) under UNCLOS that would take the Working Group’s recommendations into account. The Committee considered the scope of an ILBI, its relationship with other instruments, guiding approaches and principles, and the elements of the “package”. In spite of diverging views that had led the wide majority of countries to argue that all efforts to reach consensus had been exhausted, the PrepCom eventually adopted a non-exclusive list of potential elements on which there was “a convergence of views” that they be a part of an ILBI draft text; and a list of other potential elements on which there was divergence of views. It noted that neither list reflected a consensus in favour of inclusion, and recommended that an Intergovernmental Conference (IGC) be convened as soon as possible to commence negotiations.

On 24 December 2017, the UNGA adopted Resolution 72/249 calling on the Secretariat to convene an IGC to elaborate the text of an ILBI, with a view to developing the instrument as soon as possible. That resolution authorised an organisational meeting, followed by four sessions of the IGC, all to be held in New York City. This report briefly summarises the discussions and outcomes of the organisational meeting, which was held from 16–18 April 2018, and of the IGC-1, held 4–17 September 2018.

IGC Organisational Meeting

At last April’s IGC Organisational session, delegates elected Rena Lee (Singapore) to serve as president of IGC; established an IGC credentials committee and a 16-person, regionally balanced IGC bureau; and formally agreed to apply the UNGA’s rules of procedure to the IGC’s operations. Although favouring a “flexible
“approach” to the organisation of work, and allowing the establishment of subsidiary organs and/or informal working groups, the Conference’s outcome cautioned about the need to avoid parallel meetings to the extent possible.

With specific regard to IGC-1, the Conference concluded that it should focus on substantive discussions organised around the package of topics identified in the Working Group’s 2011 recommendations. The delegates also agreed that IGC-1 should come to consensus-based decisions on the preparation process of a zero draft; and mandated the President to prepare a concise document as an Aid to Discussions, taking into account the report of the PrepCom, capturing discussions and identifying issues that need further discussion. Delegates agreed that this document would not constitute the zero draft or contain treaty text. The zero draft could only be the result of intergovernmental negotiation.

IGC-1 Overview

During the first session of IGC-1, delegates considered the above-described President’s Aid to Discussions document, opening with general statements on their expectations for the IGC and the content of the ILBI. During most of the session, delegates met in four informal working groups, each addressing one of the four “package” topics (MGRs; area-based management tools; EIAs; and capacity building and transfer of marine technology), reporting to the plenary on Friday, 14 September. IGC-1 concluded its deliberations on Monday, 17 September. In general, IGC-1 made some progress in clarifying delegations’ positions on the elements of the “package” and offered more detailed options for its processes on two of them: area-based management tools and EIAs.

As foreshadowed by the organisational meeting, IGC-1 participants were not in agreement with regard to the timing of a zero draft of the ILBI. Most interventions supported preparation of some document, whether named a zero draft or otherwise, as a fulcrum enabling the group to fully switch into negotiating mode at the next session. They supported the approach taken by the PrepCom – that the document should be based on progress achieved so far, identifying areas of convergence and divergence and outlining options – and called for it to be circulated prior to IGC-2. Others, while supporting the idea of a zero draft, indicated that it should only be prepared and circulated after conceptual issues had been clarified, to ensure that the ILBI negotiations will be based on consensus, as the only way to ensure universal participation and the highest level of commitment. Adopting the earlier view, President Lee proposed issuing a document by 25 February 2019, for consideration at IGC-2. The document would identify areas of convergence and areas requiring further discussion; contain treaty language; and reflect different options. The President clarified that the document would not be “a full treaty text, from preamble to final clauses”, and would probably not be called a zero draft.

Informal Working Sessions

The following are brief summaries of the substantive work in the four informal working sessions.

Marine Genetic Resources

The informal working group on MGRs focused on, *inter alia*, the following points as relevant to MGRs: scope of the ILBI; applicable definitions; the access to MGRs; benefit sharing; and the relationship between the ILBI and intellectual property rights (IPRs).
Scope

The group addressed several types of scope issues, particularly determining the geographic, temporal and legal limits of the proposed instrument.

In considering the overall scope of the ILBI, most delegates appeared to agree that its geographic scope should include both “the high seas” (the waters beyond national boundaries and declared exclusive economic zones), as defined by UNCLOS, and the water column, sea bed, ocean floor and subsoil (referred to as “the Area” in international ocean law). With regard to its application to MGRs, this would mean that any MGRs in those areas that are not already covered by UNCLOS and the International Seabed Authority could be covered by the ILBI. Provisions in UNCLOS could be further developed to address resources either unregulated or insufficiently regulated. Possible jurisdictional overlaps should also be addressed.

Regarding the temporal scope of the ILBI in the context of MGRs, there appeared to be a convergence of views that UNCLOS does not currently address them. Hence, the consensus was that the ILBI should regulate access to and management of MGRS from the date it enters into force and thereafter, and should not be retroactive.

This discussion also raised points regarding existing general principles and approaches, including the freedom of the high seas, the common heritage of mankind, equitable benefit sharing, the promotion of research, the concept of “research and exploitation for peaceful purposes” and intergenerational equity.

Views diverged over how principles such as the common heritage of mankind and the freedom of the high seas would apply to MGRs. Some delegates supported considering them to be part of the common heritage, so that all countries should have access to them in a fair and equitable manner. Others objected to this approach, based on the realities of the economic benefits involved, and insisted that MGRs be subject to the freedom of the high seas. A third position called for a complementary approach, considering that neither the common-heritage principle nor high-seas freedoms could be exclusively applicable. They noted that the principle of common heritage and the freedom of the high seas are not mutually exclusive, indicating that the former can apply to resource exploitation, while the latter can address the question of access.

Delegates recognised that the treaty under negotiation should respect the sovereign rights of coastal States. Some envisioned a non-prejudice clause that would give due regard to the rights and interests of coastal States, based on relevant parts of UNCLOS and the United Nations Fish Stocks Agreement.4

Some participants suggested that the instrument define key terms, such as “MGRs” (in-situ, ex-situ and in-silico), “derivatives” and “access”. Others stressed that it is premature to focus on definitions at this stage, suggesting that discussions move forward based on working definitions drawn from existing instruments.

Some delegates insisted that the scope of the ILBI’s MGR provisions should be limited to resources found in areas beyond national jurisdiction, not those that are held ex situ. Others suggested that all MGRs be considered as originating in “areas beyond national jurisdiction” unless otherwise stated in a patent application, arguing that such an approach would clarify jurisdictional issues while protecting the rights of coastal States. Some recommended that the ILBI apply to resources in silico. Some favoured including the concept of “derivatives”, as in the Nagoya Protocol to the UN Convention on Biological Diversity6 (Nagoya Protocol), noting that there is no scientific basis for their exclusion.

The discussion also focused on the intention question, with some participants indicating that both living marine resources that are harvested as a commodity and those collected for the purpose of utilisation of their genetic resources be included. A delegate cautioned that, in practice, intentions change – that fish collected as a commodity can later be diverted into genetic research. The distinction between the two should be based on the use of resources, rather than the intention behind their collection. Some stressed that the value rather than the volume of exploited resources should be a differentiating criterion. Others suggested that, instead of distinguishing between resources based on their location, the treaty focus on the resources themselves, making a distinction between those with actual economic value and those with potential economic value, since economic value is considered key to assessing appropriate access and benefit-sharing regimes.

Access to Marine Genetic Resources

The discussion of access considered whether it should be regulated and, if so, which activities would be regulated as access, and under which conditions. Some delegates were not in favour of regulating access at all, arguing that any such restriction could have a detrimental impact on research and marine advancements in general. Others argued that there is no need to elaborate access provisions, because general rules on this topic would apply in default of a formal provision in the ILBI.

In general, however, most delegates who favoured open access to MGRs insisted that such access should not be left unregulated, although it is possible that different levels of regulated access might be required in different situations. In terms of regulatory vehicle, some suggested that access be regulated under UNCLOS, while others proposed that regulations be elaborated drawing upon the principles of the Nagoya Protocol. Viewpoints converged on the positions that the use of MGRs should exclusively serve peaceful purposes; that the regulation of access should not hamper scientific research or burden the private sector; that a robust access and benefit-sharing mechanism should be attuned to the needs and interests of developing countries; and that indigenous communities and traditional knowledge should be taken into consideration.

Regarding the nature of regulation, some delegates proposed the establishment of a free-access regime,
under which States Parties must inform the Secretariat about their activities. They proposed the development of a code of conduct for access to MGRs and favoured both mandatory reporting and requiring States to develop national legislation for the management of these resources. Others argued in favour of the establishment of an access mechanism, either permit-based or employing a licensing arrangement. Some spoke against a licence-based system, proposing an obligatory prior notification system, which would be critical for benefit sharing.

Some participants commented that while oceanographic exploration is currently driven by governments, academia and competent organisations, the technology deployed by transnational corporations for commercial purposes and the future role of the private sector should not be overlooked. Thus, there should be two regulatory tracks: one for scientific research and the other for commercial purposes. A procedure should be in place to enable a change of intent between the two. The requirement of public registration should apply without regard to the registrant’s scientific or commercial status. Additional information should be required for a corporate entity to properly register. Registration fees and change fees should be charged on a cost-recovery basis to meet administrative costs. Royalty payments for products developed from MGRs could also be an option.

**Benefit Sharing**

Discussions on benefit sharing focused on objectives, principles and approaches, considering whether the treaty should include a list to clarify the meaning of “benefits” in this context as well as how benefits might be distributed.

Some delegates considered that the guiding principle of benefit sharing should be the common heritage of mankind, and felt that this understanding should be explicitly stated in the text. The ILBI should provide the legal foundation for a fair and equitable benefit-sharing regime for MGRs. They indicated that, although financial benefit sharing should not apply to research work, research projects should share other kinds of benefits. For example, they should promote capacity building and marine scientific research by helping the international community, including developing countries, to acquire the tools for such research. In this connection, delegates agreed that priority should go to non-monetary benefits that align with the objectives of UNCLOS, including sample sharing and technology transfers.

All users of MGRs should be required to share the non-monetary benefits. Some delegates raised the challenge of ensuring that benefits are shared, calling for the development of a mechanism and institutional arrangement enabling resource traceability. Some delegates commented that regulating derivatives and ensuring their traceability would promote monetary and non-monetary benefit-sharing purposes. These comments led to a discussion of the establishment of a track-and-trace regime, including a clearing-house mechanism, for MGRs, to be overseen by the Secretariat. Discussion of these points ranged widely, noting, for example, that the Secretariat should also play a role in responding to non-compliance and that the clearing-house mechanism could establish an information portal.

Delegates highlighted the importance of ensuring that data be easily and freely available; and agreed that given the difficulties involved, advancing access to this data could be considered a benefit itself. Noting the lack of sufficient information on deep-sea taxonomy, delegates commented that the collection and sharing of information could help fill gaps in scientific knowledge while serving as a catalyst for future research. However, some delegates expressed doubts concerning the effectiveness of a benefit-sharing mechanism, underscoring that the majority of patents related to MGRs are held by private corporations, whose informational resources might not be included in a States-based clearing-house.

Participants also proposed that the instrument include a detailed and non-exhaustive list of monetary and non-monetary benefits (including the transfer of knowledge and capacity building), that would be subject to review.

Some addressed distribution of benefits, indicating that benefit-sharing should go to all developing countries, including landlocked developing countries and small island developing States, and that their special circumstances should be appropriately reflected in the ILBI. Some delegates did not support monetary benefit sharing, arguing that it could ruin research potential. Others insisted that there should be no monetary benefit sharing prior to large-scale commercialisation of a marine genetic resource.

**Intellectual Property Rights**

The conference discussed the relationship between the ILBI and IPRs. Some delegates argued that, as part of the common heritage of mankind, MGRs should not be patented and cannot be privatised. Others insisted that since IPR standards are provided in relevant treaties, there is no need for the ILBI to impose new standards. A third approach was offered to the effect that, in accordance with the principle of the common heritage of mankind, IPRs must be regarded as secondary to that heritage, but that the ILBI should otherwise approach them in a manner consistent with the agreements under the World Intellectual Property Organization. Any attempt to restrict them would not prove fruitful. The ILBI could include trust provisions to ensure inclusive international participation and protect against disproportionate benefits obtained by a single stakeholder. An option that was suggested was for the ILBI’s coverage of IPRs to include mandatory disclosure of the origin of the MGRs used, which would help increase knowledge of biodiversity.

**Capacity Building and Technology Transfer**

During the meetings of the informal working group on capacity building and technology transfer, different approaches were presented on how the instrument could concretely play a role in ensuring that capacity building contributed to the conservation and sustainable use of biodiversity in areas beyond national jurisdiction.
Mechanism

Delegates raised the possibility of the establishment of a body such as a Conference of the Parties (COP) to perform key functions under the ILBI.

Several delegates favoured a general provision on the rights and obligations of States Parties vis-à-vis capacity building and technology transfer, adding that the text should emphasise that such efforts are being undertaken for peaceful purposes.

It was generally recognised that capacity building and technology transfer should be responsive to the needs of developing countries, particularly small island developing States and least developed countries.

Conceptual and Definitional Issues

Delegates were sensitive regarding the use of terms, with some suggesting the need to specifically and formally define “capacity building” and “transfer of marine technology”, drawing on International Oceanographic Commission guidelines. The question whether the ILBI should list the types of activities included in the concepts of capacity building and technology transfer dominated discussions. Most delegations spoke in favour of embedding such a list in the ILBI. Some said the list should be indicative, non-exhaustive, flexible and based on the objectives of the ILBI; and that it should strike a balance between the protection of IPRs and the promotion of technology. Some specified that it should build on the provisions of UNCLOS and on the work, guidelines and criteria set by the International Oceanographic Commission. Some called for inclusion of a list-review mechanism, to ensure that the list does not become obsolete over time.

Some delegates expressed doubts about putting such a list in an international legal instrument, especially if that list implies binding obligations. Some emphasised the view that both technology transfer and capacity building are activities that should be carried out on a voluntary basis and be based on mutually agreed terms. Others argued that it might be better for the ILBI to establish a mandate for drafting a list, than including a list in its text. Another position that was suggested was that technology transfer and capacity building be open to all stakeholders, including civil society, and not just Parties. Others, notably from developed countries, said that they would be open to the idea of a list, so long as its inclusion does not imply obligations or undermine IPRs.

Scientific/Policy Capacity and Technology

Some delegates emphasised the need for States to translate science into effective policy. They argued that, although technology transfer should be voluntary, training (ranging from workshops and scholarships to participation in field work) should be a priority issue. Delegates suggested the establishment of a clearing-house and a capacity-building network to enable the sharing of information, experience, technology and data; and international coordination and collaboration in relation to the ILBI’s objectives. In this context, delegates again underscored the importance of developing and establishing protocols and guidelines for environmental protection, mentioning the need for a clearing-house (as a central repository for baseline data and online compilation of good practices) and a trust fund.

Monitoring and Funding

In connection with the need for monitoring and review of the effectiveness of capacity building and technology transfer under the ILBI, participants also discussed the importance of including funding provisions to address these activities. Some delegates emphasised the need for a sustainable and predictable funding mechanism that could be complemented with a voluntary trust fund. Others opposed such a mechanism, insisting that the financing of capacity-building and technology-transfer activities must rely on existing public and private sources. Some of this latter group were open to discussing a voluntary trust fund, although not supporting a mandatory fund.

Area-Based Management Tools

The discussions in the informal working group on area-based management tools most prominently addressed MPAs. These discussions revealed a general convergence on the role that such tools could play in achieving the ILBI’s objectives. Several delegates underscored the need to include a formal stipulation, clarifying that the Parties recognise these values:

- the contribution of area-based management tools to restoring the world’s oceans; and
- the important role of MPAs in building resilience to the adverse impact of climate change, ensuring food security and safeguarding aesthetic or natural wilderness values.

Many delegates stated that the ILBI must pave the way for governments to meet longstanding commitments, including the protection of 10 percent of the world’s oceans by 2020.

Designation and Institutional Oversight

Most delegates appeared to support the inclusion of a cooperation mechanism for identifying and managing MPAs in the ILBI. They noted that all MPAs within the scope of the ILBI should be included in a global network, in which an ecosystem approach and the precautionary principle should be applied. Some participants questioned the global network approach, however, noting that there are ocean areas that are not currently experiencing negative effects from human activity.

Regarding the decision-making and institutional set-up, several delegates favoured a global approach. They noted the need to establish three prongs to such an approach:

- a COP, empowered with decision-making, standard-setting and review functions;
- a Secretariat; and
- a scientific committee that would make recommendations.
Other delegations insisted that decisions regarding area-based management tools should be taken by the States directly affected or by regional and sectoral organisations.

Management Objectives and Mechanisms

Most interventions agreed that specific conservation objectives and management measures should be spelled out in the ILBI, which should also prescribe a clear process for monitoring and implementation, including sanctions for non-compliance. Some suggested the development of communication and monitoring protocols to assess the effectiveness of area-based management tools. These interventions called for specific timelines and reporting obligations. In this context, monitoring and review could be conducted by scientific and technical bodies, working in coordination with the Secretariat and reporting to the COP. The ultimate aim would be to issue recommendations focused on reaching specific goals.

Discussions of funding appeared to reach consensus, with strong support for the idea of a voluntary funding mechanism. One proposal suggested the creation of a “high seas biodiversity fund”.

Discussions regarding the establishment of a system for compliance recognised that activities in many parts of the oceans are either unregulated or have little capacity for monitoring and enforcement. Some interventions suggested the use of economic tools, such as fees and charges, taxes and licensing dues, for the prevention of non-compliance. They argued that such provisions would have an immediate impact on users, would be more effective than physical enforcement and could be much easier to apply.

Coordination with Other International Instruments

The delegates also raised issues regarding the relationship of the ILBI with existing instruments, frameworks and bodies. Viewpoints appeared to converge regarding the need to recognise and complement previous treaties without undermining their mandates. Some interventions noted the need to include measures to enhance coordination with existing regional, sectoral and international mechanisms; avoid duplication of obligations and work; and respect coastal States’ jurisdiction.

Regarding the modalities on coordination with other instruments, some delegates supported a stepwise approach. They suggested that the ILBI should include general provisions on coordination, leaving more detailed provisions to be developed through the COP, on the advice of a scientific and technical committee. They highlighted the importance of including all stakeholders in consultation regarding these issues, giving due regard to the special circumstances of small island States, as well as governments, the private sector, academia, women, youth and civil society.

Environmental Impact Assessments

Regarding EIAs, delegates exchanged views on the use of terms; procedural mechanisms; and monitoring, reporting and review modalities. Their remarks largely focused on the obligation of States to conduct EIAs, the activities for which EIAs will be required, and the ILBI’s relationship to EIA processes under relevant instruments and bodies.

Delegates agreed that EIAs should be consistent with UNCLOS and international customary law. Some suggested that the ILBI adopt the thresholds already established in the Antarctic Treaty. Many insisted that existing instruments must not be undermined or duplicated. Some suggested that EIA provisions consider the special needs of developing countries, including the need for technical and financial assistance. Others underscored the importance of international cooperation. Several pointed out the special situation of small island developing States.

Delegates proposed that the ILBI include an obligation for States to conduct EIAs for high-seas activities undertaken by their nationals or by vessels flying their flags. They would require EIAs for all activities under such States’ jurisdiction or control that might harm the marine environment. The process should involve potentially affected coastal States and indigenous communities.

Some interventions proposed that the ILBI set up a global framework dealing with thresholds and minimum requirements for EIAs, establishing a process to regularly update them and to ensure that assessments are consistent across regions. Some proposed that standards and frameworks be established by a working group and annexed to the instrument. Others focused on some specific aspects of the EIA process, indicating that cumulative impacts should be addressed through a process that assesses the impact on both the immediate and adjacent areas.

Some delegates specifically mentioned UNCLOS, citing Articles 204, 205 and 206 as the legal basis for EIAs in marine areas beyond national jurisdiction. They argued that the ILBI should follow the letter of UNCLOS and encourage States Parties to adopt domestic legislation and policies for conducting assessments in these areas. In this connection also, some delegates raised particular aspects of the EIA procedure, citing UNCLOS Article 206 as support for their view that the EIA threshold should be “reasonable grounds for believing that a particular activity might cause pollution to or harmfully change the marine environment”.

Some delegates suggested that the ILBI could identify potential impacts subject to assessment, taking every possible dimension into account. On this point, some expressed their willingness to develop a list of activities subject to assessment, commenting that such a list should be flexible and regularly updated, particularly given the changing nature of technology. Others suggested that an indicative and non-exhaustive list of activities requiring assessment could be developed at a later stage. Still others, inspired by Article 206 of UNCLOS, emphasised that setting out thresholds and criteria for assessment would allow more flexibility than a list approach.
Voluntary Trust Fund

Throughout the discussions, particularly with regard to MGRs, capacity building, technology transfer and area-based management, delegates raised questions of funding, often suggesting the establishment of one or more trust funds to promote the ILBI’s objectives and promote achievement of the UN’s Sustainable Developments Goals.

In this connection, delegates were updated on the current financial status of another trust fund – the voluntary trust fund that had already been established and is being used “for the purpose of assisting developing countries, in particular the least developed countries, landlocked developing countries and small island developing States, in attending the meetings of the Preparatory Committee and the intergovernmental conference” established by the UNGA in 2015.7 For IGC-1, the Division for Ocean Affairs and the Law of the Sea received 24 complete and on-time applications, which were all processed for assistance, with 22 attending. Participants were urged to provide continued support to the Trust Fund, even in small contributions made regularly, so that the Fund can continue ensuring meaningful assistance to those who need it.

Dates of Future Sessions

The next session (IGC-2) is currently planned for 25 March–5 April 2019, with IGC-3 scheduled for 19–30 August 2019. IGC-4 is not formally scheduled, but is expected to convene in the first half of 2020.

Notes

5 [A “pseudo-Latin” expression meaning “performed on computer or via computer simulation” in reference to biological experiments. Ed.]
6 The Convention on Biological Diversity (Rio, 1992, in force since 1993) addresses the issues of “access to genetic resources and equitable sharing of the benefits arising from their utilization” rudimentarily, in Article 15. Its Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilization (Nagoya, 2010, in force since 2014) focuses on genetic resource issues in greater detail, although its application in marine areas beyond national jurisdiction is not entirely clear.

UNICPOLOS-19

In furtherance of its mandate, “to facilitate the annual review of developments in ocean affairs”, the 19th UNICPOLOS session met in New York from 18–22 June 2018, under the guidance of Co-Chairs Kornelios Korneliou (Cyprus) and Penelope Althea Beckles (Trinidad and Tobago). The session’s focus was on the challenges posed by “anthropogenic underwater noise”.2 The session detailed the social, economic and environmental impacts of such noise, with particular attention to marine species (marine mammals, fish in general and migratory species) and ecosystems. Serious concerns were expressed regarding the lack of information and the need for a broader range of analyses (“multi-species approach”). Some participants in the discussion also underscored the importance of ensuring that any legal/regulatory and policy efforts to address this problem occur within and in accordance with the framework of the UN Convention on the Law of the Sea (UNCLOS) and the freedoms protected therein. They also emphasised that all such responses should be science-based.

In this connection, it was noted that anthropogenic underwater noise is legally recognised as a form of pollution, and that, as such, it is identified as a necessary area of action under the UN Sustainable Development Goals, particularly Goal 14 (“Conserve and sustainably use oceans, seas and marine resources for sustainable development”), under which Target 14-1 calls for specific and immediate action: “By 2025, prevent and significantly

UNICPOLOS and ISA

Other UN Meetings Addressing Ocean Issues

With the goal of providing ELP readers with awareness of other sessions that have been conducted under the looming shadow of the ILBI negotiations,1 this report provides meta-information on two relevant meetings that have taken place. Specifically, it provides very brief rundowns of the outcomes of the 19th Meeting of the United Nations Open-Ended Informal Consultative Process on Oceans and the Law of the Sea (UNICPOLOS-19); and the 24th Session (in two parts) of the International Seabed Authority (ISA-24).

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reduce marine pollution of all kinds, in particular from land-based activities, including marine debris and nutrient pollution”.

Discussions explained and underscored a range of activities that are on-going in this area, including the work of the International Maritime Organization (IMO) which has developed several relevant instruments, of which its “Guidelines for the Reduction of Underwater Noise from Commercial Shipping to Address Adverse Impacts on Marine Life” may be the most apposite. Other international bodies and processes mentioned included the Convention on Biological Diversity (CBD), the Convention on the Conservation of Migratory Species of Wild Animals (which has adopted guidelines applicable to environmental impact assessment in these contexts), the International Whaling Commission, and work under numerous regional instruments.

The impact of seismic surveys of sub-oceanic geology and geography was a matter for particular attention. In addition, the meeting emphasised a potentially potent reminder for the current ILBI negotiators, who are sometimes characterised as focusing overwhelmingly on the concept of protected areas: “Delegations underlined the need for concerted international action to assess and mitigate the effects of [anthropogenic underwater noise] in all ocean areas, owing to the interconnected nature of the ocean and the transboundary nature of the impacts of anthropogenic underwater noise”.

The meeting featured very informative panel presentations, which can be studied through the Co-Chairs’ Summary and other posted information. It also included detailed presentations describing actions undertaken within the UN system and by other organisations.

ISA-24

The 24th annual session of the ISA was held in Kingston, Jamaica in two parts: the first was a meeting of the ISA Council,3 held from 5–9 March 2018, in coordination with a meeting of the ISA Legal and Technical Commission (LTC), and the second from 16–26 July 2018 also coordinated with the LTC, as well as the Finance Committee.5 The divided session was reportedly intended “to increase transparency and engender a mutually responsive dialogue between the LTC and the Council”. Consistent with the ISA’s overall mandate to oversee the use of the resources of the seabed beyond national limits (also known as “the Area”), the session focused almost entirely on draft regulations on the exploitation of mineral resources in the deep seabed, which UNCLOS addresses under a “common heritage” regime – i.e., a recognition that no State can claim any sovereign rights over marine mineral resources that are found beyond the limits of that State’s outer continental shelf, so that any State may access them for peaceful purposes, if it does so in accordance with UNCLOS and the Agreement implementing Part XI thereof (the “Part XI Agreement”, which has been the purview of the ISA since its entry into force in 1996), and if the access provides a benefit to “mankind as a whole” in a non-discriminatory way. The two parts of the session were chaired by Olav Myklebust (Norway), who was elected as Council President for 2018.

The two parts enabled a detailed exchange of views by members of the ISA Council (Part I), after which the LTC was able to meet and organise its input on the draft regulations, followed by Council consideration of a more specific range of issues, with LTC advice, in Part II. Part II also included a meeting of the ISA Assembly, in which all ISA Members have direct input on the “big picture” (setting general policies and budgets; ratifying Council-adopted rules, regulations and procedures governing activities in the Area; and other oversight).

To this end, the basic thematic exchanges in Part I focused on law, policy and institutions surrounding exploitation and the payment mechanism, while more specific considerations in Part II addressed particular approaches: model instruments and procedures; draft substantive regulations; approaches to instances of non-compliance; and a generic and rather undefined consideration that is apparently now discussed as the “operationalization of the Enterprise”. For this purpose, “the Enterprise” is the terminology used by UNCLOS and the Part XI Agreement to refer to a commercial-like entity, which the negotiators expected the ISA to set up – an “organ of the [ISA] which shall carry out activities in the Area directly, as well as the transporting, processing and marketing of minerals recovered from the Area” that would have “legal capacity … act in accordance with [UNCLOS] and … be subject to the directives and control of the Council”. To date, given that the ISA itself carries out its own activities in the Area, the Enterprise is generally thought of as a potential means of centralising the mineral extraction activities in the Area, and avoiding the challenges currently experienced with contractors and their non-compliance. The Enterprise has never been set up, with many citing international law as the reason, rather than the fact that the Member States cannot agree on how it will operate.

In its session, the Assembly adopted a strategic plan for 2019–2023; approved an annual report; and set the budget for the coming year.

Through frequent references to the ILBI negotiations, the ISA Council made it clear that they expect the ILBI to coordinate with the draft regulations once adopted, with many States and other meeting participants emphasising the role of the regulations as instruments of environmental protection. Some discussion of the specific approach of the regulations suggested the importance of the designation of “preservation reference zones” and “impact reference zones”, also mentioning the need to coordinate with other users of the Area (e.g., transoceanic cable operators). Some discussions called for specific designation of areas in which exploitation would be allowed, limiting that list to areas in which it is already on-going. These discussions specifically mentioned the importance of coordination with the ILBI negotiations, calling for “coherence between environmental regulations and standards applicable within national jurisdiction with those being developed for areas beyond national
jurisdiction; deciding upon whether environmental considerations will be dealt with as a separate set of regulations or as part of the exploitation regulations and in what form” Some intervenors provided a list of environmental concerns to be addressed, including “chemical emissions, vibrations, geo-monitoring and seabed deformation; health and safety regulations; risk assessment and management plans; liability; and... appropriate communication and outreach”. These discussions were somewhat obscured by calls for a “level playing field” – a commercial concept. They aligned with much of the international discussion of the ILBI in noting that environmental regulations for the Area are urgently needed.

In Part II, the role of the various existing non-binding declarations of environmentally important or protected areas was once again discussed in detail. In general, each such discussion appears to have been coupled with a discussion of the need to balance environmental and commercial objectives.

The regulation discussion was also of interest to the ILBI in its approach to coordination with other bodies. Perhaps owing to their shared commercial perspectives, it was suggested that the ISA and IMO coordinate on environmental regulatory matters such as dumping from marine operations and ships. There was also strong discussion of the integration of regional programmes – another important issue before the ILBI.

In discussions of possible environmental administrative mechanisms (committees, etc.), the ILBI was raised as a counter-response to those who cautioned about the need to minimise administrative costs of the ISA and those incurred by contractors. Coupled with the reiterated statement that “environmental issues should not be relegated to an Annex”, the discussions of the regional and administrative issues strongly suggest the possibility that the ILBI may become a recognised mechanism for the ISA, enabling it to take a key position in showing how international bodies, processes and instruments can interact in a concrete and effective manner.

Another area in which ISA’s regulatory discussions can lead the way is in awareness and notification. When discussing the responsibilities of the ISA institutions, some Parties suggested that it serve as a watching agency, warning States of potential harm to the environment. This was linked to a discussion of the ISA Council’s role under UNCLOS to issue emergency orders where necessary to prevent serious harm. This issue was even linked to the questions of how to value harm to the marine environment, how to assess that value, and how and when to seek a contribution from the entity/activity causing the harm.

Apart from these general mentions of objectives and the possibility of geographic designations, the discussion of regulating activities in the Area focused primarily on the facilitation and oversight of marine mineral extraction in the Area. In this connection, discussion became somewhat contentious over the Council’s perceived focus on whether the proposed regulations are “commercially viable”, calling instead for a focus on “ensuring that regulatory provisions are technologically, scientifically, and environmentally viable, taking into account commercial interests”. Environmental protection arose as a general objective toward which the regulations would be directed. Ultimately, in Part I the Council called for efforts to “ensure that regulatory provisions are technically, scientifically, and environmentally viable; [and] examine ways to pay reasonable regard to other activities in the marine environment, such as navigation, submarine cables, fisheries, and MSR”, as two among a very lengthy list of items to be investigated.

Also relevant to the work of the ILBI negotiators was the ISA-24 discussion of the financial aspects of activities in the Area – the payment mechanism, compliance and “benefit sharing”. This discussion is particularly important, given that the ISA has been tasked with oversight of the use of an international resource over which all countries have common claims, and that its obligation is specifically tied to ensuring that users pay appropriately and that these financial benefits are appropriately used and/or shared. Although current discussions of “access and benefit sharing” (ABS) under the CBD derive from a clause adopted at approximately the same time (CBD, Article 15), there has been little, if any, serious work on a formal approach to the collection and sharing of benefits in that realm. Thus, the current focus of the ILBI negotiations on ABS should probably pay close attention to the challenges faced by the ISA, as pioneers both in global benefit sharing and in addressing marine resources in areas beyond national jurisdiction.

To date, however, the lesson from the ISA regarding these matters is that they are very difficult to address in international public law and practice. For example, although the key to a successful commercial system is effective response to compliance, the ISA has yet to take any measures regarding contractors’ non-compliance for a variety of reasons, ranging from the difficulty in establishing/documenting non-compliance, sensitivity of developing countries to the prospect of non-compliance penalties, and general concerns about confidentiality. Concerns prompted some delegates to suggest that the “sponsoring State” – the State with the greatest incentive to preserve and protect the extractive-industry companies it sponsors – take the lead role in oversight of the area. Discussions of the payment mechanism were often characterised by concern for ensuring the continued viability of the entities engaging in resource extraction.

Similarly disappointing is the fact that the basis for valuation of the minerals for the purpose of obtaining financial benefit for them has also not been agreed; and that the discussions of a “model” in this context were extremely vague with regard to their informational basis. This is troubling for those proposing to address benefit sharing, given that minerals are assets for which there is already valuation data, hence the ISA’s only challenge is deciding how to price the rights of access to them. By comparison, ABS analyses are focused on “genetic resources”, which did not exist as a commercial concept prior to 1992, and on which valuation bases are even less concrete.
Inevitably, these discussions led to the suggestion that a separate document be developed containing “non-legally binding standards or guidelines”, although some participants favoured “legally binding standards for contractors [with] a review mechanism, which does not entail reopening the regulations”. Either approach would arguably be given a different type and level of deference in the ILBI negotiations and in the implementation of whatever instrument those negotiations produce.

In particular, the sessions indicated that the LTC is intending to undertake further work on several issues, including, inter alia, the following:

- interlinkage with the ILBI “process”;
- environmental liability;
- common heritage; and
- “the need to protect developing countries from adverse economic effects of mining in the Area”.

Nothing in the report indicates that this work will be done in conjunction with the ILBI negotiations or working groups, or that the various workshops the ISA Council proposed will feed into the ILBI process. There were interventions that strongly urged constructive engagement by each State in the ILBI process.

Other Meetings of Note

International maritime and marine law is a very full field, with important developments arising in a range of meetings that cannot be adequately covered by remote authors. In particular, we have a keen interest in the legal and policy discussions and determinations of the Commission on the Limits of the Continental Shelf, whose closed sessions are producing concrete, but often hard-worked results. In addition, we have limited information on the work of the UN Educational, Scientific and Cultural Organization on the interrelationships between oceans and climate issues, the G7’s recent 1st Ocean Risk Summit, and/or the various meetings within the Antarctic Treaty System.

EPL continues to seek persons who attend (or have direct access to materials from) these or other key meetings in this field, who may be willing to become “frequent contributors” (paid reporters) to our journal on these processes. [TRY]

Notes

1 See p. 262, supra.
3 The ISA Council consists of 36 individual elected delegates each representing their particular State. Council members are elected in a manner that ensures a mix of representation of the five “groups” of States participating in the ISA: States that are net importers of the minerals and other commodities produced by those that exploit resources of the Area; investors in such resource exploitation ventures; “major net exporters” of minerals from the Area; developing State Parties “representing special interests”; and “members elected according to the principle of equitable geographical distribution in the Council as a whole”.
4 The 30-member LTC is an organ of the Council. Its members are elected by the Council on the basis of personal qualifications in the field of natural resources law, particularly with regard to ocean mining.
6 In Article 1, UNCLOS defines “the Area” as “the seabed and ocean floor and subsoil thereof, beyond the limits of national jurisdiction”. Although the use of the term “national jurisdiction” was controversial initially and never formally defined, in practice it has come to be thought of as including each State’s territorial seas (UNCLOS, Article 2) and outer continental shelf areas (UNCLOS, Article 76), both of which are indisputably jurisdictional designations; and also, in most discussions, presumed to include any “exclusive economic zone” (EEZ) that the State has declared. EEZs were originally thought not to be jurisdictional declarations, since UNCLOS phrases this declaration as an action allowed of States, and the EEZ as an area over which UNCLOS’s rules and requirements have ultimate authority.
7 See p. 299, infra.

CBD

Recognition of Indigenous Peoples and Local Communities in Domestic Access and Benefit-Sharing Legislation and Policies

by Hasrat Arjjumend

It is the indigenous peoples who are known to be the most sustainable societies on the planet. In 2011, the Grand Council of the Crees and others articulated that indigenous peoples and local communities (ILCs) have a distinct essential role in safeguarding the biodiversity that benefits humankind.1 However, indigenous peoples are among the most disadvantaged peoples in the world.2 The mainstream non-indigenous societies, throughout an exploitative history, have threatened the survival of indigenous people and the bases of their sustenance, especially natural resources. As a consequence, even the basic human rights of such native communities have been jeopardised. At the international level, several instruments

1 Senior Fellow, Centre for International Sustainable Development Law, McGill University Faculty of Law, Montreal, Canada.

2 ibid.
and processes are in place, which strive to safeguard indigenous people and their life-sustaining natural resources, particularly land, forests, waters and islands.

The Convention on Biological Diversity (CBD)3 and its Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilization (NP)4 address the biological diversity and “associated traditional knowledge” (in this article traditional knowledge associated with biological diversity will be referred to as “indigenous traditional knowledge” or “ITK”) of the ILCs, and provide for the protection of resources and rights of ILCs in accordance with the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP).5

According to rights advocates, the ILCs’ demand for self-determination is at the core of their human rights.6 For this purpose, Anaya describes “self-determination” as comprising certain core values, including non-discrimination, protection of cultural integrity, rights over lands and natural resources, social welfare for economic wellbeing, and self-government.7 According to Jonas et al., indigenous peoples’ “right of self-determination” is expressed in the CBD in the form of the ILCs’ self-governance over natural resources and traditional knowledge, which is ensured by CBD Articles 8(j) and 10(c).8 Subsequently, confirming the need to recognise and respect the rights of ILCs, the Nagoya Protocol contains provisions concerning the ILCs’ involvement in issuing prior informed consent (PIC) and mutually agreed terms (MAT), free access to biological resources, and unrestricted exchange of genetic resources.

NP Articles 5.2, 5.5, 6.3, 8, 15.1, 16.1 and 18.2 particularly bind the Parties to formulate, enact and implement domestic legislation, policies, administrative measures and governance systems in order to realise the Protocol’s intent and spirit. The NP also refers to Parties’ domestic or national law on “access to genetic resources and equitably sharing the benefits arising from their utilization” (ABS) in relation to core variables, including PIC; approval and involvement; and MAT. NP Articles 6.2, 7 and 12.3(b) specifically call for the participation of indigenous people and/or recognition of their contribution. In all circumstances, States must make serious efforts to implement the NP provisions. As of August 2017, 47 countries and the European Union had reported adopting domestic ABS legislation, policy or administrative systems.9

In the context of indigenous people’s rights over biological/genetic resources and ITK, States are encouraged to recognise, respect, honour and protect ILCs in specific clauses of the CBD, Nagoya Protocol and UNDRIP. States’ compliance with these provisions, however, needs to be evaluated/validated and measured both quantitatively and qualitatively. After the NP came into force in October 2014, each of its 97 Parties was asked to submit an Interim National Report of Implementation by November 2017.10 Without these interim or final compliance reports, nothing substantial can be concluded about the field-level implementation of the Protocol’s provisions.

So, how can one assess and measure the potential field implications of the Protocol in the particular context of recognition and realisation of the rights, participation, involvement, importance and space of indigenous people? The author of this paper has undertaken a survey of indigenous people’s organisations, and agencies or officials designated as 12 countries’ competent national authorities (CNAs) under the NP, to gauge the field implications of the implementation of the NP in the context of ILCs’ participation in PIC, MAT, access to bioresources and free exchange of genetic resources within them. The variables chosen under this article have direct relevance to historically violated rights of indigenous communities. The importance of these variables is reiterated by the UN Permanent Forum on Indigenous Issues which emphasises the role of the CBD and, eventually, the NP.

[C]onsistent with international human rights law, States have an obligation to recognize and protect the rights of indigenous peoples to control access to the genetic resources that originate in their lands and waters and any associated indigenous traditional knowledge. Such recognition must be a key element of the [proposed] international regime on access and benefit-sharing, consistent with the United Nations Declaration on the Rights of Indigenous Peoples.11

In this article, the analysis of survey data is used to extrapolate and illustrate the trends regarding policy/legal measures and how various nations treat their indigenous people legally and administratively on the issues of indigenous rights, autonomy and integrity. Discussion of the results links to contemporary debates over the space and recognition given to indigenous people in the NP and the human rights addressed in UNDRIP.

Methodology

As part of a project on ABS studies at the Academy of International Studies of Jamia Millia Islamia,12 field data were gathered between 2012 and 2015. Evidence was gathered both non-reactively13 (analysis of existing documents and secondary information) and through reactive processes (structured interviews and participant observation).

Sampling for Structured Interviews

Employing stratified random sampling in the structured interviews of a list of potential respondents, the study selected organisations and individuals working on or advocating ILC issues from among civil society groups worldwide, and then contacted them. Based on responses, the list was narrowed down using various criteria imposed by different constraints. Survey participants able to respond to questions in English were contacted via email. In total, 5,876 organisations, groups and individuals were contacted electronically and/or face-to-face. Efforts were made to ensure that the sample included female participants, was geographically representative and would be easy to access for follow-up purposes, if needed. Interviews with 15 persons
representing diverse organisations from various parts of the world provide the basic data received. Appendix 1 presents the interviewees’ responses.

A similar process of expert sampling was used to obtain input from the CNAs. The CNAs designated by the governments of 50 countries from South Asia, Southeast Asia, West Asia, Central Asia and North Asia were contacted face-to-face and by email. CNAs of 12 of these countries responded to the questionnaire with substantial information. Some countries (e.g., Bahrain, Singapore, Qatar and South Korea) replied only that they had not started any preparation for ABS legislation or policy in their respective countries; hence they did not attempt the structured interview questionnaire. The 12 responding countries were India, Bangladesh, Nepal, Thailand, Viet Nam, Lao PDR, Timor Leste, Brunei Darussalam, Philippines, Mongolia, China and Russia. Their responses are tabulated and presented in Appendix 2.

**Structured Interviews**

Prior to contacting potential respondents, a set of questions was prepared. The questions were grouped as follows:

1. Recognition of ILCs in issuing PIC and MAT; and
2. Recognition of ILCs’ access to bioresources in their territories.

Appendix 1 sets out the five questions posed to indigenous organisations/individuals; and Appendix 2, the eight included in the questionnaires sent to CNAs. The nature of the questions was intentionally focused and pertinent, and the number of questions kept to a minimum, in light of a combination of factors, such as the survey need, respondents’ profile, and ambience of international forums where respondents could be contacted face-to-face.

**Participant Observation**

One of the research tools adopted was participant observation of negotiation processes in the CBD’s global forums. Participant observation is a research technique used for qualitative research purposes. DeMunck and Sobo describe participant observation as the primary method used by anthropologists doing fieldwork, which involves “active looking, improving memory, informal interviewing, writing detailed field notes, and ... patience”. The authors specifically interacted with and observed the delegates of selected countries, as they took part in the negotiation meetings of the Conference of Parties (COP), intergovernmental (pre-COP) sessions, side events and meetings of ILCs, NGOs and international organisations, and open shows organised by ILCs. They also attended and observed debates concerning PIC, MAT and indigenous rights. These first-hand observations were noted at the following two international meetings on the ABS regime:

1. Second Meeting of the Open-Ended Ad Hoc Intergovernmental Committee for the Nagoya Protocol on ABS (ICNP-2) (9–13 April 2012, New Delhi, India); and
2. Eleventh Meeting of the Conference of the Parties (COP-11) to the Convention on Biological Diversity (8–19 October 2012, Hyderabad, India).

In their observations, the authors paid particular attention to how ILC members were engaged and involved, not only in scheduled sessions, but also in side events.

**Other Observation**

Some of the data examined in this article are based on “on-the-ground” observation in India.

**Results and Discussion**

The present article is fundamentally based on the framework of “equity and justice” principles enshrined in the NP, focusing on their integration into the legal realm of national ABS regimes. Analysts refer to a pertinent statement: “good policy is just a starting point – good practice is more difficult to achieve”. This quote can perfectly correlate to the context of international or national indigenous rights and entitlements. For example, so far only half of the 97 Parties to the NP report having promulgated relevant domestic ABS legislation or policies, and these domestic laws or policies have not yet been seen to function at “ground level”. The task of realising the laws in the interests of indigenous people is even more difficult. Cotula and Mayers highlight the gap between what is “on paper” and what happens “in practice” in the context of land tenure in the territories where indigenous people and marginalised communities reside. They underscore the fact that despite growing international recognition of indigenous communities’ rights to self-determination of their futures and management of their natural resources, international rights are far from a solution against local disempowerment or the denial of procedural and substantive justice.

On similar lines, activists are sceptical as to whether the NP will help communities at the local level. Such doubts appear justified by close scrutiny of the field implications of newly emerged international law (i.e., the NP). For example, the case of benefit sharing in South Africa with regard to the Hoodia plant has been highly publicised as a moral victory for the San community, which received recognition of their rights relating to traditional knowledge of the use of that plant. It is reported, however, that the Hoodia benefit-sharing arrangement has undermined traditional values and knowledge and the resource governance systems of the San community. Jonas et al. argued that the governance reforms weakened the San’s traditional forms of authority, increased the community’s reliance on external expert opinion, exacerbated power and information asymmetries in and across San communities, and fostered mistrust between the San and Nama communities. As this example demonstrates, justice for indigenous people does not prevail. In the words of the Hon. Rosalie Abella, Justice of the Supreme Court of Canada, regarding the plight of indigenous people, “We need more than the rhetoric of justice. We need justice....”
This study hypothesises that States have a poor record of recognising, respecting, honouring and realising the rights of their own indigenous people. Consequently, the implementation of relevant provisions of NP may also be treated not as seriously by States as it should be. Initially, these statements can be substantiated with the reported facts in the Joint Submission of the Grand Council of the Crees et al.: States have adopted measures to the detriment of indigenous and local communities. In some States, the existence of specific indigenous peoples is not recognized – and even if they are, States often refuse to affirm indigenous peoples’ resource rights in national legislation.23

Similarly, the UN Department of Economic and Social Affairs (DESA) noted that “indigenous peoples continue to lobby governments for the full legal recognition of their traditional land rights”.24 Likewise Faizi and Nair have established that, although India has the world’s largest population of “adivasis”,25 post-colonial Indian governments have unfortunately refused to recognise them as “indigenous people”.26 They have instead been listed in India’s Constitution among “Scheduled Tribes”, a decision that is alleged to be part of a conspiracy by the dominant settler group (Aryans) to evade claims of aboriginal people for their lands and resources. In light of such dispossessing acts of States, the analysis of this study’s stated variables is intended to determine the field implications of whatever domestic ABS legislation or policies may exist in the countries implementing the NP.

Recognition of ILCs in Issuing PIC and MAT

Rattanakrajangsri and Degawan describe the PIC process as the practice of giving or withholding permission. It is the right to choose or to make decisions. It emanates from the recognition of the full property rights of a group over a certain area/resource.27 It is part and parcel of the right to self-determination.28

The ILCs’ grant of PIC to the provider/user Parties is the manifestation of recognition, involvement and participation of ILCs and their rights over their genetic resources and “associated traditional knowledge”. The Grand Council of the Crees et al., noting the preamble to the NP, reaffirm the “importance of promoting equity and fairness in negotiation of mutually agreed terms (MAT) between providers and users of genetic resources”.29 Such agreements underline the importance of indigenous “consent”, in regard to traditional knowledge and genetic resources. They further emphasise that NP Article 6 should have required States to ensure the effective protection of the rights of ILCs including those relating to PIC.30 Such duties are consistent with UNDRIP and other international human rights law. As indicated by the Committee on Economic, Social and Cultural Rights:

States parties should adopt measures to ensure the effective protection of the interests of indigenous peoples relating to their productions, which are often expressions of their cultural heritage and traditional knowledge. ... In implementing these protection measures, States parties should respect the principle of free, prior and informed consent of the indigenous authors concerned.31 [Emphasis added]

The NP addresses PIC explicitly in Article 6.2:

In accordance with domestic law, each Party shall take measures, as appropriate, with the aim of ensuring that the prior informed consent or approval and involvement of indigenous and local communities is obtained for access to genetic resources where they have the established right to grant access to such resources.32

and in Article 7:

In accordance with domestic law, each Party shall take measures, as appropriate, with the aim of ensuring that traditional knowledge associated with genetic resources, that is held by indigenous and local communities, is accessed with the prior and informed consent or approval and involvement of these indigenous and local communities, and that mutually agreed terms have been established.33

The field implications of both these articles need to be verified.

Survey Results

The following is a summary of the data received through the survey on the ILC’s involvement in the PIC and MAT processes (these points are grouped by relationships, and do not follow the order of the questionnaires as presented in Appendices 1 and 2).

Appendix 1, Question 1: Indigenous organisations/individuals were asked whether their country would “involve the ILCs in developing the PIC and MAT, before allowing the user countries to access and utilize genetic resources or associated ITK held by ILCs”. Of 15 respondents, only one said that his/her country would “involve ILCs effectively” in this process and only two affirmatively indicated that their countries would involve ILCs in developing the PIC and MAT. One respondent declined any such possibility of involving the ILCs in developing the PIC and MAT, and another noted that “no ABS instrument is evolved or evolving in the country”. The majority of respondents (66.68 percent) gave no opinion on this question.

Appendix 1, Question 2: Three of the 15 indigenous organisations/individual respondents claimed that the PIC is mandatory under their existing/evolving domestic ABS legislation/policy, as a prerequisite to access to and utilisation of genetic resources or associated ITK. On the other hand, two respondents (13.34 percent) highlighted that the PIC is mentioned in their existing/evolving domestic ABS legislation/policy, but it is not mandatory. However, one respondent (6.66 percent) indicated that PIC is not mentioned in his/her country’s existing/evolving ABS law/policy. The majority of respondents (60 percent) showed lack of awareness on this issue.
Appendix 2, Question 1: When CNAs were asked “[w]hether the domestic ABS policy/law should respect the ILCs’ right to grant PIC and right to sign MATs”, 9 out of 12 responded. Four (Bangladesh, Thailand, Viet Nam and Russia) opined that ABS policy/law should respect that right “to a large extent”, while four others (India, Lao PDR, Philippines and China) opined in favour of respecting it “to some extent”. Surprisingly, Mongolia’s response was negative.

Observation: Informal discussions during participant observation processes at international meetings revealed the following regarding the roles of ILCs in the issuance of PIC and MAT:

- Participation of ILCs is solicited in the PIC, MAT and benefit-sharing processes proposed in the evolving legislation of Russia.
- The Philippines confirmed the involvement of ILCs in preparing MAT. However, its ABS legislation requires that developed MATs signed by ILCs must be ratified by the appropriate national government agency. According to the CNA of the Philippines, such a provision had to be taken into consideration in the revision of the country’s existing ABS policy.
- Authorities of India’s National Biodiversity Authority highlighted the relevant legal provisions. According to them, Section 41 of the Biological Diversity Act, 2002 provides for the constitution of Biodiversity Management Committees (BMCs) within its area for the purpose of promoting conservation, sustainable use and documentation of biological diversity including preservation of habitats, conservation of landraces, folk varieties and cultivars, domesticated stocks and breeds of animals and microorganisms, and chronicling of knowledge relating to biological diversity. Section 41(2) provides that the National Biodiversity Authority and the State Biodiversity Boards shall consult the BMCs while taking any decision relating to the use of biological resources and knowledge associated with such resources occurring within the territorial jurisdiction of the BMCs. Section 41(3) provides that BMCs may collect fees from any person for accessing or collecting any biological resources for commercial purposes from areas falling within its territorial jurisdiction.

Appendix 2, Question 2: The 12 CNAs also considered their national legislative and policy provisions in the context of NP Articles 6.1 and 6.2. Nine of them responded, with the majority of these (India, Thailand, Lao PDR, Viet Nam and Philippines) indicating that “PIC is mandatory in their existing/evolving ABS legislation/policy”, while two others stated that it was “mentioned ..., but not mandatory”. The CNAs of the other two responding countries (Mongolia and Russia) said that “there is no mention of PIC in their existing/evolving ABS legislation/policies”.

Appendix 2, Question 3: The PIC requires several steps as a process, so it comprises the creation of elaborate procedures and relevant formats. Nevertheless, the participation and involvement of ILCs in laying down the procedures for filing PIC are critical since the PIC process needs to be controlled by ILCs, not by the State per se. This is addressed by question 3, to which nine of the 12 surveyed CNAs responded. Of these, three (India, Viet Nam and the Philippines) responded that their existing/evolving ABS legislation/policies include a provision to ensure participation and involvement of ILCs in creating the procedures/format of PIC, while another four (Bangladesh, Mongolia, Russia and China) responded that they have no such provision.

Appendix 1, Question 3: Results from Appendix 2 question 3, above, conform to the indigenous organisations’/individuals’ responses, on the same point. Only 13.34 percent of respondents indicated their view that their countries would ensure effective participation of their ILCs in the establishment of mechanisms to inform the potential users about their obligations before accessing any genetic resources and associated ITK. The majority (40 percent) expressed the view that, although their countries will ensure participation of ILCs in establishing the mechanisms to inform the potential users about the obligations that will apply before they access genetic resources and associated ITK, that participation would not be effective. The remaining respondents said either that “no ABS instrument is evolved or evolving” in their respective countries (20 percent) or that they had no knowledge on this point.

Appendix 2, Question 4: As above, there is currently a relative deficiency regarding the involvement of ILCs in ABS legislation/policy processes; however, all of the surveyed CNAs, except those of Timor Leste (who offered no opinion) and Mongolia, were of the opinion that their country was willing to make this commitment. The CNAs of India, Nepal, Bangladesh, Thailand, Lao PDR, Viet Nam, Philippines, Brunei and Russia indicated full commitment to consulting, involving or engaging the ILCs in PIC issuance, while China showed only limited commitment.

Appendix 2, Question 5: NP Articles 5.135 and 7 emphasise the necessity of establishing MAT between the provider and user, with critical involvement of ILCs. Considering the existing inequities and imbalance of power between provider (usually “developing”) countries and user (usually “developed”) countries, the NP reiterated the need for MAT to minimise the asymmetries of the ABS deal.36 When asked whether their respective countries’ ABS legislation/policy “include[s] provisions of drafting MAT on equity principles, opposing the dominating positions of user countries”, ten CNAs responded. Of these, 70 percent (India, Bangladesh, Thailand, Lao PDR, Viet Nam, Philippines and Russia) confirmed that their respective country’s ABS legislation/policy includes provisions for drafting MAT on equity principles that stand opposed to the dominating positions of user countries, as envisaged in NP Article 5.1. Brunei and Mongolia reported that their
respective country’s ABS legislation/policy does not include such provisions, and the CNA from China did not disclose that country’s position.

Appendix 2, Question 6: The NP particularly stresses the social equity and justice aspects of the need to ensure effective participation of ILCs in MAT processes. Half of the ten CNAs that responded to this question (India, Thailand, Viet Nam, Philippines and Russia) confirmed that their ABS legislation/policies provide for ILC engagement in the development of MAT, in accordance with NP Article 12.3(b). Another 40 percent (Lao PDR, Brunei, Mongolia and China) indicated that their country has no such law or policy. Bangladesh’s CNA responded only to state that he was unaware of such a provision.

Analysis of Survey Results

The dismal situation of States in acquiring PIC before accessing or providing the genetic resources or associated TK held by ILCs should not be viewed in isolation from the various respondents’ overall perceptions of national laws. Different countries have perceived the meaning of PIC differently, and thus it has affected their domestic ABS laws or policies and also, as a result, their implementing the measures. Sometimes the national law refers only to “consultation” with ILCs rather than their “consent”, because the law makers recognise the “right to consultation” but not the right to give “consent” or permission. Other laws focus on the “participation” of indigenous peoples or their “right to be heard” in decision-making processes.

There are, of course, States whose laws do not say anything about the right of indigenous peoples to consent or consultation. Some recognise the right to consultation or participation in general (for example in a law on “good governance”, citizen participation or decentralisation), without specifically singling out indigenous peoples. Some States (e.g., Canada) claim that two different standards could apply: one the general standard of “prior and informed consent” and the other a standard that calls for “approval and involvement”. This could suggest that there would only be “involvement” in relation to situations of “approval” and not “PIC”. Such an interpretation would not be coherent and would be inconsistent with international and domestic law. The following is the analysis of the particular responsive data, as described above.

Appendix 1, Indigenous individuals and organisations: Analysis of indigenous organisations’ and individuals’ responses to question 1 indicates that there is only a remote possibility on the part of various countries of involving the ILCs in developing the PIC and MAT before allowing user countries to access and utilise genetic resources or associated ITK held by ILCs. Their responses to question 2, however, indicate that although many countries include indigenous people within the scope of PIC in domestic ABS law, PIC is not made mandatory in such law/policy. For example, India’s Biological Diversity Act, 2002 lacks any provision for mandatory PIC before access/utilisation of genetic resources or associated ITK held by ILCs. India’s ABS law/policy has long been casual about the PIC of indigenous people and has not considered it mandatory.

Appendix 2, CNAs: Responses to question 1 indicate a lack of seriousness amongst CNAs of more than half of the surveyed countries (India, Lao PDR, Philippines, China and Mongolia) on the issue of respecting the ILCs’ right to grant PIC and right to sign MAT. This reaffirms the recorded views of indigenous organisations/individuals, described in the analysis of the data from Appendix 1, above. Responses to question 2 also make it evident that many of the surveyed countries’ domestic ABS legislation/policy does in fact make PIC mandatory before access/utilisation of genetic resources or associated ITK. However, a number of other countries also expressed that such provisions are not made mandatory in their respective legal instruments. Thus, the PIC is neither conceived nor incorporated in national ABS legislation/policies of such countries in the same spirit as it is envisaged in Article 6.1 and Article 6.2 of the NP.

Responses to question 3 also demonstrate that the majority of the countries favour the participation of ILCs in establishing the mechanisms to inform the potential users about their obligations before accessing any genetic resources and associated ITK, but are of the opinion that participation would not be effective. However, only one-third of the responding CNAs are of the opinion that their countries’ existing/evolving ABS legislation/policy provides space to ensure the participation and involvement of ILCs in the creation of PIC procedures. Despite current situations of ILC involvement, ten of the 12 CNAs were of the opinion that their country was willing to commit to consulting, involving or engaging the ILCs in issuing PIC (question 4).

As shown by their responses to question 5, the majority of CNAs have received clear legislative/policy guidance regarding the relevant equity principles (opposing the dominating positions of user countries as envisaged in NP Article 15.1) in drafting MAT.

Finally, responses to question 6 reflected the CNAs’ opinions that the majority of the countries take quite strong positions in relation to the execution of MAT principles and the involvement of ILCs in that process. The CNA of Viet Nam added that the benefits under Biodiversity Law, 2008, are to be shared among stakeholders, including the ILCs that own the genetic resources or associated ITK, based on a MAT agreement that has been agreed upon at an earlier stage. The CNA of the Philippines elaborated the “real meaning” of participation and justice in two ways: first, concerned ILCs shall have a share in any royalty to be paid for patented products and technology developed from use of biological resources from the country; second, they may also share in in-kind benefits (scholarships, livelihood opportunities, capacity-building programmes) from funds generated from up-front payments made by resource users; and third, ILCs contributions will be acknowledged in research reports, copies of which will also be shared with them.

Observation: Observations relating to India’s BMCs reveal that India’s ABS law only refers to local communities (with
no obvious mention of indigenous people), in allowing them to form a BMC as their local ABS implementing institution. Such BMCs are not organic institutions and lack the perspectives of indigenous rights in light of UNDRIP.

**Summary:** A human-rights-based approach should be used to ensure recognition and respect for the rights of ILCs. According to Lassen, MAT preparation requires contemporary world perspectives and negotiation skills.

Lucy Mulenkei of the Indigenous Information Network summed the situation up as follows: most governments are not involving ILCs fully in the PIC, MAT and benefit-sharing processes. Most have no knowledge yet of their national ABS regulations, nor of the processes of negotiating commercial contracts. She articulated that there will be no fair and equitable sharing of benefits if ILCs are not fully involved in negotiating MAT. Simply providing PIC is not enough. ILCs should seek competent legal advice and enter into cooperation with appropriate capacity development programmes. Were it to become known that their genetic resources and associated ITK are being utilised without the necessary PIC and MAT, the ILCs involved need to be able to seek the support of their national CNA and contact the CNA in the country of the user of genetic resources. She advocates that CNAs of provider countries should support ILCs in such cases with legal advice and through additional communication with user country CNAs.

**Recognition of ILCs’ Access to Their Own Bioresources**

The ILCs’ access to bioresources within their territories equates to the “customary use” of biological resources, as addressed under CBD Article 10(c):

> Each Contracting Party shall as far as possible and as appropriate: ... (c) Protect and encourage customary use of biological resources in accordance with traditional cultural practices that are compatible with conservation or sustainable use requirements.

“Customary use” is a well-established basis for recognition of indigenous peoples’ land and resource rights in international and domestic legal systems. Considering the CBD context, in a joint submission, the Grand Council of the Crees et al. noted that the CBD’s use of the phrase “customary use of biological resources in accordance with traditional cultural practices” signifies that States have a positive obligation to safeguard and promote these practices. The Joint Submission goes on to quote an excerpt from a note by the Executive Secretary of the CBD: “[I]t is the traditional purposes for such taking which should remain paramount in considering customary uses of biological resources and traditional cultural practices.”

The following is a brief presentation of the data collected regarding national recognition of ILCs’ access to bioresources, followed by an analysis of that data.

**Survey Results**

Restriction of ILCs’ access to and customary use of biological/genetic resources amounts to a violation of their rights. According to the Grand Council of the Crees et al., any dispossession or diminution of the rights of indigenous peoples and local communities would be inconsistent with the central objective of “fair and equitable” benefit sharing of genetic resources. As stated in the NP preamble: “[N]othing in this Protocol shall be construed as diminishing or extinguishing the existing rights of indigenous and local communities.” In international law, State sovereignty is not absolute— it is limited, for example, by the obligations accepted by States in the Charter of the United Nations and other treaties. As required by the Charter of the United Nations, the UN and its member States have a duty to promote “universal respect for, and observance of, human rights and fundamental freedoms for all without distinction.” Such duty includes universal respect for the human rights of indigenous peoples affirmed in UNDRIP.

Contrary to this duty, however, State laws compartmentalise the otherwise interdependent aspects of bioresource interactions of ILCs by drawing legislative borders around them and addressing them as distinct segments. Eventually, while the communities manage integrated landscapes, the State tends to view each resource and associated traditional knowledge through a narrow lens, implementing corresponding laws through agencies that separately address, for example, biodiversity, forests, agriculture, and indigenous knowledge systems. The result is that communities’ lives are disaggregated in law and policy, which effectively fragments and reduces their claims to self-determination.

**Appendix 1, Question 4:** It appears that the entire world is talking about giving users of any country access to the biological resources existing in any other country of the world; however, most countries appear to restrict access to the same bioresources by their own ILCs. As a result, the study posed the following question to the surveyed indigenous organisations/individuals: “Does your country restrict the ILCs’ access to bioresources in forests and protected areas?” To this question, 13.34 percent of respondents confirmed total restriction of ILCs’ access to bioresources in forests and protected areas in their respective countries; 53.32 percent confirmed selective restriction; while 13.34 percent of respondents said that their respective country does not restrict ILCs’ access to these bioresources.

**Appendix 2, Question 7:** The results of data from CNAs, however, show an opposite trend. Of the ten CNAs that responded to this question, half (specifically India, Nepal, Thailand, Philippines and Mongolia) said that their country does not restrict the ILCs’ access to bioresources in forests and protected areas. The countries whose CNAs frankly admitted that they put at least partial restrictions on their own ILCs’ access to bioresources in forests and protected areas were Bangladesh, Lao PDR, Viet Nam, Russia and China. Two CNAs, those of Brunei and Timor, did not address the question at all.

**Appendix 1, Question 5:** Traditional communities often have informal networks within neighbourhoods or territories, through which they share, barter, exchange,
borrow and donate essential resources including bioresources and genetic resources. Seed exchange is one such popular example which may be seen in every traditional community relying on natural resources. Such seeds may be of crop plants, forest trees, medicinal plants, ornamental plants or cultural-value plants. In response to the question of whether the country ensures the rights of ILCs to exchange genetic resources and ITK within and amongst themselves, only 33 percent of surveyed indigenous organisations/individuals responded to the question. Only 6.66 percent of the total group opined that their countries fully ensure the rights of ILCs to exchange genetic resources and ITK within and amongst themselves, while 13.34 percent of respondents said that their respective countries partially ensure these rights. The remaining 13.34 percent indicated that their respective country restricts ILCs exchanging genetic resources and ITK within and amongst themselves.

**Appendix 2. Question 8:** On this point, however, 40 percent of the CNAs of responding countries (India, Thailand, Viet Nam and Philippines) responded differently, saying that they fully ensure the rights of ILCs to exchange genetic resources and ITK within and amongst themselves. Another 40 percent (from Bangladesh, Lao PDR, Mongolia and Russia) stated that they partially ensure these rights. No response to this point was received from Nepal, Brunei or Timor.

**Analysis of Survey Results**

International legal instruments like the NP would normally take years to trickle down within the various countries of the world.\(^{59}\) In many of them, dispossession is a historical fact for ILCs – millions have been and continue to be displaced from the forests, wetlands and river ecosystems that have been their ancestral homes. They have had their livelihoods taken away along with their lifestyles and had been forced into subjugation and humiliation. Laws made for the betterment of indigenous people are kept in “cold storage”.\(^{60}\) A prominent example of this is India’s Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006, which was intended to ensure rights. The Act, however, is not only half-heartedly implemented but has been amended to render it ineffective. This underscores a major problem – the wide gap between policy making and its implementation, which indicates a lack of commitment within the government. There is a need for the emergence of strong civil society movements in which ILCs, NGOs, academicians and activists should actively participate and claim their rights from the State.

**Appendix 1. Indigenous individuals and organisations:**

Responses to question 4 reveal that a majority of countries surveyed put restrictions on their own ILCs’ access to bioresources in forests and protected areas. It also seems pertinent, in light of responses to question 5, that various countries do not provide significant support to ILCs that exchange genetic resources and ITK within and amongst themselves.

**Appendix 2. CNAs:** Based on responses to question 7, half of the countries in the world put at least partial restrictions on their own ILCs’ access to bioresources in forests and protected areas. Indeed, ground observation in India suggests that even countries whose CNA responded differently impose such restrictions in practice (see, e.g., the Indian Forest Act, 1927, and India’s Wildlife (Protection) Act 1972, both of which include full or partial restrictions on ILCs’ access to bioresources in forests and protected areas). Therefore, it may be appropriate to infer that this conclusion applies to other countries as well.

In this table, question 8 results indicate that the views of competent national authorities of surveyed countries were divided on the issue of the rights of ILCs to exchange genetic resources and ITK within and amongst themselves. Half of them fully ensure the rights of ILCs, whereas half of them only partially ensure these rights. This is less than satisfactory.

**Conclusion**

Various countries had/have the opportunity to demonstrate that they recognise and enforce the rights of ILCs over the biological resources within their territories through making the PIC of ILCs and MAT mandatory in their respective domestic ABS legislation/policies or administrative measures. However, in practice, the MAT agreements are mostly written in the way that the States dominate all avenues of access and benefit sharing. Largely, countries do not seem to be adhering to the provisions addressing the need for PIC to be mandatory before users may access/utilise any genetic resources or associated ITK.

PIC needs to be the major point of future debates in the biodiversity governance forums. The consultation, involvement or engagement of the ILCs in issuing the PIC to user Parties before accessing/utilising any genetic resources and associated TK must be given urgent attention.

The PIC must be followed by the execution and implementation of agreements based on MAT, in order for the user to gain access to the genetic resources and associated TK. Again however, in practice, the space for the ILCs remains either completely absent or marginal. Even where MATs have been negotiated, the definition of MAT is not clearly understood or explained, leaving the questions of whether (and how much) TK access has been allowed open to speculation and hence interpretation that could go against the interests of the ILCs providing such access.\(^{61}\) There is an increase in the possibility of violation of rights of the most vulnerable communities through some crafty drafting of MAT. Therefore, the engagement and involvement of ILCs in drafting and executing MAT need to be ensured by both provider Party as well as the user Party.

As noted, ILCs as custodians of natural resources are often denied access to the resources in a bid to colonise, enclose and control the natural treasure by the State (a process which is also known as the “stratification” of resources). ILCs are the first casualties in these processes,
which happen conventionally in the majority of countries. Some States deny ILCs’ rights of exchanging the genetic resources held by them, in the same way.

Observations lead the author to recognise another disturbing trend – State laws being compartmentalised and disaggregated. The implementation of those disaggregated State laws further compounds the challenges by requiring communities to engage with disparate stakeholders.62 Communities thus face a stark choice to either reject these inherently limited frameworks (something which is a virtual impossibility, considering the ubiquitous nature of State law) or engage with them at the potential expense of becoming complicit in the disaggregation of their otherwise holistic ways of life and governance systems.63 In both the conditions, the communities end up losing out.

Furthermore, since most of the biopiracy involves the most powerful countries, they will always find ways to circumvent international or domestic laws; and the ILCs being in the weakest position in most cases may not be able to assert their rights over the genetic resources. In such a situation, the national ABS laws/policies need to give desirable space and recognition to respective ILCs in order to protect and conserve the biodiversity within their territories. However, it is dissatisfying when the provider countries (especially developing nations) silently accept the neoliberalisation and commodification of genetic resources imposed by user countries and entities. Notably, the promotion of community-controlled governance grossly depends on the space given in domestic laws of the countries. A number of countries’ existing policies/laws recognise the ILCs. Even in these, however, the ILCs are not in a position to claim their rights by using enabling laws.

A majority of the countries have dismal records of adhering to the NP and are even neglecting to report adequately to the Convention/Protocol.

### Appendix 1. Survey of indigenous organisations and individuals

<table>
<thead>
<tr>
<th>Question</th>
<th>*Respondents (n=15)</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Recognition of ILCs in issuing PIC and MAT</strong></td>
<td>In brackets, the no. of respondents</td>
<td></td>
</tr>
<tr>
<td>1. Will your country involve the ILCs in developing the PIC and MAT before allowing users to access and utilise your resources or ITK?</td>
<td>1. Yes, our country would involve ILCs effectively in developing the PIC and MAT (1) (2)</td>
<td>06.66%</td>
</tr>
<tr>
<td></td>
<td>2. Yes, our country would involve ILCs in developing the PIC and MAT, but in name only (2)</td>
<td>13.34%</td>
</tr>
<tr>
<td></td>
<td>3. No, our country would not involve the ILCs at all in developing the PIC and MAT (1)</td>
<td>06.66%</td>
</tr>
<tr>
<td></td>
<td>4. No ABS instrument is evolved or evolving in my country (1)</td>
<td>06.66%</td>
</tr>
<tr>
<td></td>
<td>5. I cannot say (10)</td>
<td>66.68%</td>
</tr>
<tr>
<td>2. Does your country’s ABS legislation/policy make the PIC mandatory before access to or utilisation of genetic resources or associated ITK?</td>
<td>1. Yes, the PIC is mandatory in our existing/evolving ABS legislation/policy (3)</td>
<td>20.00%</td>
</tr>
<tr>
<td></td>
<td>2. Yes, the PIC is mentioned in our existing/evolving ABS legislation/policy, but it is not mandatory (2)</td>
<td>13.34%</td>
</tr>
<tr>
<td></td>
<td>3. No, there is no mention of PIC in our existing/evolving ABS legislation/policy (1)</td>
<td>06.66%</td>
</tr>
<tr>
<td></td>
<td>4. No ABS instrument is evolved or evolving in my country</td>
<td>0%</td>
</tr>
<tr>
<td></td>
<td>5. I don’t know (9)</td>
<td>60.00%</td>
</tr>
<tr>
<td>3. Will your country ensure effective ILC participation when establishing the pre-access mechanisms to inform potential users of their obligations?</td>
<td>1. Yes, our country will ensure effective participation of our ILCs (2)</td>
<td>13.34%</td>
</tr>
<tr>
<td></td>
<td>2. Yes, our country will ensure participation of our ILCs, but that would not be effective (6)</td>
<td>40.00%</td>
</tr>
<tr>
<td></td>
<td>3. No ABS instrument is evolved or evolving in my country (3)</td>
<td>20.00%</td>
</tr>
<tr>
<td></td>
<td>4. I am not aware (4)</td>
<td>26.66%</td>
</tr>
<tr>
<td><strong>Recognition of ILCs’ access to bioresources in their territories</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Does your country restrict the ILCs’ access to bioresources in forests and protected areas?</td>
<td>1. Yes, our country fully restricts our ILCs’ access to bioresources in forests and protected areas (2)</td>
<td>13.34%</td>
</tr>
<tr>
<td></td>
<td>2. Yes, our country selectively restricts our ILCs’ access to bioresources in forests and protected areas (8)</td>
<td>53.32%</td>
</tr>
<tr>
<td></td>
<td>3. No, our country does not restrict our ILCs’ access to bioresources in forests and protected areas (2)</td>
<td>13.34%</td>
</tr>
<tr>
<td></td>
<td>4. I cannot say (3)</td>
<td>20.00%</td>
</tr>
<tr>
<td>5. Does your country ensure the rights of ILCs to exchange genetic resources and ITK within and amongst themselves?</td>
<td>1. Yes, our country fully ensures the rights of ILCs to exchange genetic resources and ITK within and amongst themselves (1)</td>
<td>06.66%</td>
</tr>
<tr>
<td></td>
<td>2. Yes, our country partially ensures the rights of ILCs to exchange genetic resources and ITK within and amongst themselves (2)</td>
<td>13.34%</td>
</tr>
<tr>
<td></td>
<td>3. No, our country restricts our ILCs exchanging genetic resources and ITK within and amongst themselves (2)</td>
<td>13.34%</td>
</tr>
<tr>
<td></td>
<td>4. I cannot say (10)</td>
<td>66.66%</td>
</tr>
</tbody>
</table>

* Respondents: 1. Unrepresented Nations and Peoples Organization, Belgium (Emma Chippendale); 2. Mbororo Social and Cultural Development Organization, Cameroon (Sal Django); 3. Grand Council of the Crees, Canada (Paul Joffe); 4. Kanuri Development Association, Nigeria (Babagana Maurice); 5. Legal Assistance Centre, Namibia (Peter Watson); 6. Forêt pour le Développement Intégral, Democratic Republic of the Congo (Nsase Soki Abubakar); 5. World Institute for a Sustainable Humanity, Sierra Leone (Alpha Beretay); 6. Direct Sponsor (Tribal Networks), Ireland (Andy Savage); 7. Organization, Cameroon (Sali Django); 3. Grand Council of the Crees, Canada (Paul Joffe); 4. Kanuri Development Association, Nigeria (Babagana Maurice); 9. Alex Nyamujulirwa George (individual), Tanzania; 10. Imad Abdel Moniem (individual), Sudan; 11. Mizoram Chakma Development Organization, India (Hemant Larma); 12. NESAM Trust, India (P. Murugan); 13. Citizens Foundation, India (Amit Kumar); Centre for Policy Solution, India (Sanjay Garg); and 15. M. Sudhakar (individual), India.
### Appendix 2. Opinions of CBD/NP Parties (as of 2014)

<table>
<thead>
<tr>
<th>Q#</th>
<th>Survey questions</th>
<th>Response options</th>
<th>% of countries' response</th>
<th>Responses of countries</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>South Asia</td>
<td>South-east Asia</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>I</td>
<td>N</td>
</tr>
<tr>
<td>1.</td>
<td>Does the national ABS policy/law recognize the ILCs’ right to grant FPIC and right to sign MATs, and in what way?</td>
<td>1. Yes, to a large extent  2. Yes, to some extent  3. No, not at all  4. I do not know</td>
<td>1. 44.44%  2. 44.44%  3. 11.11%  4. 00.00%</td>
<td>NAt = 3</td>
</tr>
<tr>
<td>2.</td>
<td>In accordance with Article 6.1 and Article 6.2 of the NP, does your country’s ABS legislation/policy make the PIC mandatory before access to and utilisation of genetic resources or associated ITK?</td>
<td>1. Yes, the PIC is mandatory in our existing/evolving ABS legislation/policy  2. Yes, the PIC is mentioned in our existing/evolving ABS legislation/policy, but it is not mandatory  3. No, there is no mention of PIC in our existing/evolving ABS legislation/policy</td>
<td>1. 55.56%  2. 22.22%  3. 22.22% NAt = 2 NAp = 1</td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td>Does your country’s ABS legislation/policy provide to ensure participation and involvement of ILCs in creating procedures/format of PIC?</td>
<td>1. Yes, our existing/evolving ABS legislation/policy has such a provision  2. No, there is no such provision in our existing/evolving ABS legislation/policy  3. I am not aware</td>
<td>1. 33.33%  2. 44.44%  3. 22.22% NAt = 2 NAp = 1</td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td>Is your country committed to consult, involve or engage the ILCs in issuing the PIC to user Parties before accessing/utilising any genetic resources and associated ITK?</td>
<td>1. Yes, our country is fully committed  2. Yes, our country is somewhat committed  3. No, our country has no such mandate  4. I cannot say</td>
<td>1. 81.81%  2. 00.00%  3. 09.09%  4. 00.00% NAt = 3 NAp = 1</td>
<td></td>
</tr>
<tr>
<td>5.</td>
<td>As envisaged in Article 5.1 of NP, does your country’s ABS legislation/policy include provisions of drafting MAT on equity principles, opposing the dominating positions of user countries (usually developed nations)?</td>
<td>1. Yes, our country has legal provision in ABS law/policy to draft MAT on equity principles  2. Yes, our country has legal provision in ABS law/policy to draft MAT, but not on equity principles  3. No, our country has no legal provision in ABS law/policy to draft MAT  4. I cannot say</td>
<td>1. 70.00%  2. 00.00%  3. 20.00%  4. 10.00% NAt = 1 NAp = 1</td>
<td></td>
</tr>
<tr>
<td>6.</td>
<td>In accordance with NP Article 12.3(b), does your country’s ABS legislation/policy provide for engaging your ILCs in developing the MAT?</td>
<td>1. Yes, our country’s ABS law/policy provides for engaging our ILCs in developing the MAT  2. No, our country has no such provision in ABS law/policy  3. I cannot say</td>
<td>1. 50.00%  2. 40.00%  3. 10.00% NAt = 1 NAp = 1</td>
<td></td>
</tr>
</tbody>
</table>

#### ILCs' Access to Bioresources in their Territories

<table>
<thead>
<tr>
<th>Q#</th>
<th>Survey questions</th>
<th>Response options</th>
<th>% of countries' response</th>
<th>Responses of countries</th>
</tr>
</thead>
<tbody>
<tr>
<td>7.</td>
<td>Does your country restrict the ILCs’ access to bioresources in forests and protected areas?</td>
<td>1. Yes, our country fully restricts our ILCs’ access to bioresources in forests and protected areas  2. Yes, our country selectively restricts our ILCs’ access to bioresources in forests and protected areas  3. No, our country does not restrict our ILCs’ access to bioresources in forests and protected areas  4. I cannot say</td>
<td>1. 00.00%  2. 50.00%  3. 50.00%  4. 00.00% NAt = 2</td>
<td></td>
</tr>
<tr>
<td>8.</td>
<td>Does your country ensure the rights of ILCs to exchange genetic resources and ITK within and amongst themselves?</td>
<td>1. Yes, our country fully ensures the rights of ILCs to exchange genetic resources and ITK within and amongst themselves  2. Yes, our country partially ensures the rights of ILCs to exchange genetic resources and ITK within and amongst themselves  3. No, our country restricts our ILCs exchanging genetic resources and ITK within and amongst themselves  4. I cannot say</td>
<td>1. 40.00%  2. 40.00%  3. 00.00%  4. 20.00% NAt = 2</td>
<td></td>
</tr>
</tbody>
</table>

NAt = Not Attempted; NAp = Not Applicable  
I = India; N = Nepal; Ba = Bangladesh; Th = Thailand; L = Lao PDR; V = Viet Nam; P = Philippines; Br = Brunei; M = Mongolia; R = Russia; C = China; Ti = Timor Leste
Notes
4 Promulgated under the CBD, ibid., the NP was adopted on 29 October 2010 by the Tenth Conference of the Parties to the CBD (COP-10) in Nagoya, Japan. It was opened for signature by Parties to the CBD from 2 February 2011 to 1 February 2012 at the UN Headquarters, New York. It entered into force on 12 October 2014.
8 Supra, note 6.
9 This information is based on an examination of the ABS Clearing-House (ABSC) on the CBD website at https://abscbd.int/search/nation/RecordSchema/5-Search-Range-5. As of 5 August 2017, no country has filed either an interim or final report on ABSC. Ibid.
11 Established in 1920 by Act of Indian Parliament. The University’s website is at http://jmi.ac.in.
12 In nonreactive research, the people studied are unaware that they form part of a study and are not a part of the researcher’s study or research goals. The creation of nonreactive measures follows the logic of quantitative measurement, although qualitative researchers also make use of nonreactive measurement. The operational definition of each variable includes how the researcher systematically notes and records observations. Behave-reactive measures indicate a construct indirectly, the researcher needs to rule out reasons for the observation other than the construct of interest.
18 Supra note 17, at 23.
20 Supra, note 6.
25 According to the Oxford Dictionary, an adavis is a member of any of the aboriginal tribal peoples living in India before the arrival of the Aryans in the second millennium BC. The adavis were termed as “Scheduled Tribes” in the Constitution of India, Article 342.
27 15 The most important international legal instruments or mechanisms in which the right to PIC of indigenous peoples is clearly recognised include (1) UNDRIP, supra, note 5 (see Articles 10, 11, 19, 28, 29 and 32); (2) Convention 169 of the International Labour Organisation ("Convention concerning Indigenous and Tribal Peoples in Independent and Associated Territories") 1989 (See Articles 6.2, 7 and 16.2). Online at https://ilo.org/dyn/normlex/en/f?p=NORMLEXPUB:12100:0:::NO:PI2100_IL0_CODE:C169; (3) UN OHRCH Committees on (i) Elimination of Racial Discrimination (website https://www.ohchr.org/en/brhodies/cedpages/cedindex.aspx); (ii) Economic, Social and Cultural Rights, various observations on State obligations (website: https://www.ohchr.org/EN/HRBodies/CESCR/Pages/CESCRIndex.aspx); (4) CBD, supra, note 3 (See Article 8(g) and various decisions of the Conference of the Parties); (5) various multilateral institutions, banks, donor agencies and donor countries, and international and regional organisations that make reference to PIC in their decisions or guidelines, including the European Union, Association of South-East Asian Nations, World Bank, Asian Development Bank, Inter-American Development Bank, many UN specialised agencies and programmes; and (6) the Inter-American Commission on Human Rights (website: http://en.wikipedia.org/wiki/Inter-American_Commission_on_Human_Rights).
29 Supra, note 1.
30 Ibid.
31 UN OHRCH Committee on Economic, Social and Cultural Rights, General Comment No. 12 (“The right of everyone to benefit from the protection of the moral and material interests resulting from any scientific, literary or artistic production of which he is the author”). 2008. UNGA Res. 61/295 (Annex). UN Doc. A/61/49.
32 Addressing Article 15, para. 1(c), of the International Covenant on Economic, Social and Cultural Rights.
33 NP, Article 6.2.3.
34 Article 7.
35 Ibid., Article 6.1: “In the exercise of sovereign rights over natural resources, and subject to domestic access and benefit-sharing legislation or regulatory requirements, access to genetic resources for their utilization shall be subject to the prior informed consent of the Party providing such resources that is the country of origin of such resources or a Party that has acquired the genetic resources in accordance with the CBD, unless otherwise determined by that Party.”
36 Ibid., Article 5.1: “In accordance with Article 15, paragraphs 3 and 7 of the CBD, benefits arising from the utilization of genetic resources as well as subsequent applications and commercialization shall be shared in a fair and equitable way with the Party providing such resources that is the country of origin of such resources or a Party that has acquired the genetic resources in accordance with the CBD. Such sharing shall be upon mutually agreed terms” [emphasis added].
37 Ibid, Article 15.1: “Each Party shall take appropriate, effective and preventive administrative, legislative or policy measures to provide that genetic resources utilised within its jurisdiction have been accessed in accordance with prior informed consent and that mutually agreed terms have been established, as required by the domestic access and benefit-sharing legislation or regulatory requirements of the other Party.”
38 Ibid, Article 12.3(b): “Parties shall endeavour to support, as appropriate, the development by indigenous and local communities, including women within these communities, of... (b) Minimum requirements for mutually agreed terms to secure the fair and equitable sharing of benefits arising from the utilisation of traditional knowledge associated with genetic resources.”
40 Permanent Forum on Indigenous Issues. 2011. Report on the Tenth Session. Online at http://undocs.org/E/C.19/2011/14. At para. 36, this report notes, in regard to free prior informed consent, “the Forum affirms that the right of indigenous peoples to such consent can never be replaced or by permit the use of the notion of ‘consultation’”. See also 2009. Black’s Law Dictionary, 9th ed. (St Paul MN: Thomson Reuters) at 346: “Consent, n. ... Agreement, approval, or permission as to some act or purpose, esp. voluntarily by a competent person thereunto effective consent. ... Informed consent, ... A person’s agreement to allow something to happen, made with full knowledge of the risks involved and the alternatives” [emphasis in original]; and see supra, note 1.
41 Supra, note 36.
CBD: SBSTTA and SBI

Subsidiary Bodies Finalise Preparations for Upcoming COP

In preparation for their upcoming meeting at its Conferences of Parties (COPs), the Parties to the Convention on Biological Diversity (CBD) held the 22nd meeting of that Convention’s Subsidiary Body on Scientific, Technical and Technological Advice (SBSTTA-22) and the second meeting of its Subsidiary Body on Implementation (SBI-2) in back-to-back sessions from 2–13 July 2018 in Montréal, Canada. Under the direction of current SBSTTA Chair Theresa Mundita Lim (Philippines) and SBI-2 Chair Francis Ogwal (Uganda), these meetings operated (as their predecessors have operated for most of the past two decades) as pre-negotiating sessions, preparing draft decisions to be presented to the three planned CBD COP events (CBD COP-14; the Ninth Meeting of Parties to the Cartagena Protocol on Biosafety (COP/MOP-9); and the third Meeting of the Parties to the Nagoya Protocol on access and benefit-sharing (COP/MOP-3) all of which will be held in Sharm El Sheikh, Egypt in November 2018.

To this end, SBSTTA-22 adopted 10 recommendations (recommended decisions) and SBI-2 adopted 20. These ranged from issues of strong current international interest (e.g., ecologically or biologically significant marine areas, or “EBSAs”) to issues of minimal controversy (e.g., upcoming review processes, etc.). This report will briefly summarise the major areas of discussion of the two meetings.

SBSTTA-22

Throughout SBSTTA-22, the need to maximise coordination – both among the three bodies (CBD COP, Cartagena COP/MOP and Nagoya COP/MOP) and among all international instruments and processes relevant to biodiversity – was increasingly clear. The report of SBSTTA’s deliberations needs to reflect that realisation by dividing recommendations into four categories: general recommendations (i.e., matters with significant relevance across all three bodies); and specific recommendations directed to particular instruments (in this case, to Cartagena COP/MOP-9). Most of SBSTTA-22’s recommendations had notable relevance to all three bodies, given that both Protocols have major interest in and impact on genetic diversity issues and solutions. In addition to matters directed to the CBD COP, however, SBSTTA also made one direct recommendation to the Cartagena COP/MOP.
General Recommendations (Initially Directed to COP-14)

Genetic Material and Information

Two of the more detailed discussions were focused on high-tech developments in the area of genetic resources: digital sequencing and synthetic biology. The former of these topics was addressed in discussions mandated by a COP-13 decision, which presumed that SBSTTA's inquiries would provide scientific understanding on these difficult questions, enabling the political discussions at COP level to go forward in an informed way. Unfortunately, as it went forward, the SBSTTA discussion suggests that all that has happened is that the political discussions occurred at SBSTTA level.

In essence, these two discussions reflect the current status of the two CBD protocols. The digital sequencing discussion was research-oriented, and as such raised Nagoya Protocol questions – essentially: how much control/oversight is needed and appropriate regarding the use of genetic information that originated in a country other than that of the country sponsoring or conducting the research? By contrast, the “synthetic biology” issue is focused around the created organisms, which is generally the sphere of the Cartagena Protocol. This discussion focused on whether and in what circumstances such organisms may be used/released in the environment (outside the laboratory). Thus, the two discussions provide a relatively clear picture of the current state of political negotiations in the two protocols.

The digital-sequencing discussion shared with the Nagoya Protocol a continuing uncertainty regarding inclusion, and a tendency to avoid making progress by sidestepping the basic issues and claiming that the problem is one of “terminology”. The Nagoya Protocol itself epitomises the fallacy of this approach – in its negotiations, the Parties were unable to agree on the basic underlying concepts of access and benefit sharing (ABS), eventually claiming that resolution of the terminology questions was the source of the problem. As a result, the Parties adopted definitions that were so ambiguous that neither side opposed them – definitions that are still a source of problems, since few countries have been able to use them as a basis for the drafting of legally functional laws, regulations or contracts.

These Nagoya Protocol political challenges were reflected in the digital-sequencing discussion, which again sidelined them as “terminology” problems. While doing so, however, Parties reiterated virtually all of the “terminology” arguments from the Nagoya negotiations – arguments that went to the very core of the Protocol by asking (but never concretely answering) what kinds of resources are included within its scope.

In SBSTTA-22, this issue was joined by countries that argued that “digital sequencing information on genetic resources” is not itself a genetic resource, and as such is outside of the scope of both the CBD and the Nagoya Protocol. This returns to the basic unresolved challenge of the entire discussion of ABS under the CBD: what is the difference between a genetic resource and a biological resource? If there is a difference, it appears to be the fact that genetic sequences are actually information encoded in biological material. This suggests that the biological material is a biological resource, but the information it contains is a genetic resource.

Predictably, the discussion divided on the same old lines, with some countries and non-governmental organisations cautioning against any decision that might apply to international trade or the free flow of information, and others noting that the ABS concept and Nagoya Protocol are not intended as trade or informational restrictions, but as vehicles for ensuring “the fair and equitable sharing of benefits”, a situation that the CBD negotiators expected to “incentivise the conservation and sustainable use of biodiversity”. This latter position basically (and perhaps ominously) says that, if both sides find common ground, ABS can fulfill its original role in the CBD with minimal impact on trade or access.

Again, in similarity with the Nagoya Protocol, the discussions ended with virtually no consensus on any point. The entire text of SBSTTA’s recommended decision for COP-14 was bracketed (an indication of lack of consensus on the bracketed material), with some points within the text bracketed again, presumably indicating a greater than usual level of lack of consensus.2

By contrast, the SBSTTA-22 discussions of synthetic biology were much tamer, in keeping with the current status of the Cartagena Protocol, under which many formerly contentious issues were neutralised. Here also, the negotiators returned to previous tactics focused on the scope and need for action. In this case, a significant portion of the discussion focused on the question of whether SBSTTA had authority to address these matters, under its previously adopted procedures for identifying “new and emerging issues” on which it can take action.

In this context, some countries argued that the issue was not “new and emerging”, but rather only an “extension of modern biotechnology”. Given that CBD Article 16, the clause under which the Cartagena Protocol negotiations were authorised, is focused on “modern biotechnology”, this argument suggests that, if SBSTTA’s discussion of synthetic biology were not considered to address a “new and emerging issue”, it would be simply justified under a different heading. Nonetheless, it was discussed in detail in connection with extending the authorisation and considering the scope of the Ad-hoc Technical Expert Group (AHTEG) that has been addressing the issue.

The most pressing substantive points discussed under this agenda item related to precaution and whether some sort of moratorium is needed with regard to actions involving the products of synthetic biological engineering, while the CBD and Cartagena Parties determine how they should be addressed. It was also suggested (and eventually bracketed) that processes be established for “regular horizon scanning, monitoring, and assessment of new developments in the field of synthetic biology”.

Rather than broadly bracketing their recommendation (it does contain a few bracketed phrases), the Parties
ultimately adopted a document that either excludes or postpones all of the major issues over which they had contended.\(^3\) It notes that synthetic biology is a cross-cutting issue and that there are many positions relating to it. It also called for extending the AHTEG, but did not raise the scope questions.

**Current International Interest in Marine Biodiversity**

With regard to marine and coastal biodiversity, the discussions appear to have been relatively minimal, despite the fact that major international negotiations on these topics were about to begin.\(^4\) Discussions of these matters appear to have been relatively perfunctory and almost entirely focused on the concept of “ecologically or biologically significant marine areas” (EBSAs), which will be a major point of collaboration between the CBD and the ongoing negotiations, although a laundry list of other issues that have been discussed in CBD marine biodiversity resolutions was eventually added to the decision.\(^5\)

In this area, too, SBSTTA’s recommendation included bracketed text and, once again, the brackets appear to reflect political rather than scientific-technical disagreement.\(^6\) One area of disagreement related to draft language that referred to the UN Convention on the Law of the Sea (UNCLOS) as “the legal framework within which all activities in the oceans and seas must be carried out”. Other references to the international negotiations were also bracketed. Ultimately, the decision simply notes that the UN General Assembly plays the central role in these matters.

Another area of contention related to EBSAs and revolved around whether the designation of such areas had management implications. There was additional disagreement over the strength of the recommendation’s mention of the work done and positions taken relating to EBSAs and especially the modification of previously declared EBSAs.

**Other Coordination with International Instruments and Processes**

Three other primarily political COP decisions on which scientific-technical recommendations were deemed necessary related to international coordination – especially coordination beyond the umbrella of the CBD’s international processes. These decisions addressed, respectively, “biodiversity and climate change”; the CBD’s relationship with the work of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES); and ongoing attention to the CBD’s major coordination outreach document, the Aichi Biodiversity Targets (noting that there are fewer than three years remaining in which to achieve them).

These discussions were generally non-contentious, and also involved little that was scientific, technical or technological. The climate-change recommendation included draft “voluntary guidelines for the design and effective implementation of ecosystem-based approaches to climate change adaptation and disaster risk reduction”, over which there was the predictable disagreement about whether the SBSTTA should “adopt” or only “endorse” them. A relatively limited discussion focused on a key element: the development of each country’s nationally determined contributions (NDCs) – the aspect of the implementation of the UN Framework Convention on Climate Change (UNFCCC) in which the CBD Parties and their focal points could exercise a coordinating role.

The recommendation\(^7\) included two bracketed paragraphs with particular scientific/technical content. One called on the CBD Secretariat to review new scientific and technical information on various aspects of the climate-change/biodiversity crossover (including the consideration of ecosystem issues, mitigation and disaster risk reduction, and ecosystem restoration and sustainable land management), even referring to the findings of the Intergovernmental Panel on Climate Change (IPCC) special report on the goal of keeping the global mean temperature rise below 1.5°C.

With regard to the IPBES, there was even less disagreement, as the proposed recommendation was even less controversial. In the end, SBSTTA adopted a recommendation that “welcomed” IPBES’s currently planned activities and indicated a desire to have input into future planning processes.\(^8\)

Similarly, relatively little substantive discussion is recorded regarding, or appears to have been warranted by, the agenda item on the Aichi Targets. This item’s discussion was integrated with the IPBES discussion, given that recent IPBES assessments addressed issues of concern within the Targets. The Body’s final decision was to welcome these contributions and included statements generally supporting the targets and encouraging efforts in this final three years of their coverage.\(^9\)

**Other Crosscutting and CBD-COP Issues**

Three other agenda items produced recommendations directed at COP-14: one on protected areas, one on invasive species and one on pollinators. Although all of these have been contentious in the CBD processes at some point, none of these discussions appear to have been intense, and none even got to the point of needing a drafting group to develop their draft recommendation.

The protected areas decision focused on “other measures for enhanced conservation and management” of such areas. The SBSTTA recommendation on this agenda item defined such a measure as “a geographically defined area other than a Protected Area, which is governed and managed in ways that achieve positive and sustained long-term outcomes for the *in-situ* conservation of biodiversity, with associated ecosystem functions and services and where applicable, cultural, spiritual, socio-economic, and other locally relevant values”.\(^10\) That recommendation included voluntary guiding principles on such measures, which of course were “welcomed” rather than “adopted”, despite their title’s express inclusion of the “voluntary” designation.

The SBSTTA-22 discussion on invasive species continues debates that have a 20-year history. They
reiterated an earlier call for exploration of “the possibility of a global system of classification and labelling pertinent to invasive alien species”, and even reopened the heavily belaboured question of terminology – with some interventions pressuring that the full term “invasive alien species” (IAS) should be used for every reference to the category of species, rather than “alien organisms”, as sometimes appeared. The recommendation on this topic emphasised a recent IPBES decision to undertake a thematic assessment of IAS, and also “welcomed” additional voluntary guidance related to this issue. It opted to continue work on the issue through another AHTEG and other mechanisms.

While the pollinators issue has not been openly controversial, it has had the distinction of having been strongly supported by both developed and developing countries. In the SBSTTA’s ultimate output, which recommends the adoption of an annexed “Plan of Action 2018–2030 for the International Initiative for the Conservation and Sustainable Use of Pollinators”, there was general agreement, apart from some debate over whether to retain an indirect reference to the Cartagena Protocol (the mention of “living modified organisms” or LMOs) in the document. The recommendation is relatively standard in its approach to the plan of action.

Matters Directed to Cartagena Protocol COP/MOP-9

SBSTTA-22 adopted one recommendation that was directly addressed to the Cartagena Protocol on Biosafety, addressing two core aspects of that protocol’s implementation – risk assessment and risk management. The contact group formed to consider this issue, also considered a Cartagena-Protocol-relevant issue that had arisen in the discussion on synthetic biology. The primary point of debate was simply whether there was a need for additional research and guidance on the adverse effects of living modified organisms “containing engineered gene drives”, before such organisms can be released into the environment. This discussion took the delegates into other areas as well, including the possible need for guidance on such issues as “synthetic biology, living modified fish, soil-dwelling organisms, and coexistence between LMOs and non-LMOs”. Eventually the discussion boiled down to a question of whether the time and expense of addressing this issue through formal guidance or extended work was necessary “at this time”. The ultimate recommendation opted for the additional work in the form of a new AHTEG on risk assessment, an online forum and a “process for the identification and prioritization of specific issues of risk assessment of LMOs”.

SBI-2

The recently initiated SBI process is entirely built around the idea of coordinated development within the CBD sphere, leading to a greater ability to coordinate with relevant activities, processes and situations outside that sphere. Thus, although some of its work was primarily directed at implementation of a particular instrument (the Nagoya Protocol), even this work was addressed from the shared perspective, enabling this newest protocol to benefit from previous CBD experiences.

SBI-2 took a range of actions, including adopting 20 recommendations. The work can be considered in five basic categories: strategy; planning/resources; review/assessment; operations; and capacity building.

Strategic Issues

If SBI-2 can be said to have had a theme, it would appear to have been “Mainstreaming of Biodiversity within and across Sectors”. This concept has been identified since 1992 as a key necessity of international environmental policy, but has often received short shrift from agencies and sectors with mandates beyond environmental matters. SBI-2’s examination of this issue appears not to have joined in the general approach of perceiving “mainstreaming” only in terms of the outward movement of environmental agencies getting involved in other areas of policy, but rather to include recognition by environmental sectors of the importance of other sectoral mandates. Some attendees suggested that the discussions still emphasised the former, however.

Substantively, the SBI-2 recommendation, beyond general statements, focused on the following:
- coordination between the environmental/biodiversity stakeholders and the energy and mining, infrastructure, and manufacturing and processing sectors;
- establishment of a long-term strategic approach for mainstreaming biodiversity and an “Informal Advisory Group on Mainstreaming of Biodiversity” assigned to “advise the Secretariat and the Bureau on the further development of the proposal for a long-term approach to mainstreaming biodiversity”, to be considered by SBI-3; and
- developing indicators, metrics, and other tools and approaches and plans relating to mainstreaming biodiversity for other sectors, particularly the health sector.

Although the recommendation included brackets, it appeared to represent concrete progress in this far-from-concrete area.

Another strategy-related discussion focused on examination of the progress within the CBD and related instruments and processes, in implementing the Strategic Plan of the Convention. Work in this area has seen the return of the CBD’s highly successful “national biodiversity strategy and action plan” (NBSAP) programme to prominent attention, leading to some discussion of ways that its return to the fore can be enhanced. This item also presented an opportunity for the Parties to showcase the extent to which their use of targets and indicators has matured since the initial forays around the turn of the century, and the role of the Aichi Targets as a major international tool of coordination and development.

Another generally strategic issue discussed follow-up to the Strategic Plan for Biodiversity. Discussion of this item does not appear to have been notably different from
the discussions leading up to the initial Strategic Plan, at most adding the word “more” in several places (i.e., calling for a plan that was “more” concrete, “more” practical, “more” flexible, “more” effective and/or involved “more” stakeholder groups, as well as one that leveraged “more” financial resources). After some wrangling regarding how the decision should address the Nagoya Protocol, special mention of the protocol was bracketed in the final recommendation. The draft recommendation that was reportedly adopted bears a strong resemblance to other and earlier resolutions calling for the commencement of strategic planning processes.

Planning and Resources

Connected to its strategic responsibilities, SBI also has a mandate to address planning issues, particularly those relating to resources, both for substantive implementation of the strategies and for operation of the Convention, protocols and established bodies. It addressed these issues in three relatively straightforward and uncontested recommendations. The first addresses the mobilisation of resources for substantive implementation of biodiversity objectives. This discussion and recommendation focused around the available funding sources, the need for more such sources, the manner in which needs were identified and the challenges faced relating to reporting on such matters.

A related agenda item called on the SBI to “pre-review” the report of the Global Environment Facility (GEF), prior to its presentation to the COP. Discussion of this item paralleled the normal discussion in the COP of each GEF priority instrument, when it considers and reviews the GEF report. Specifically, it included a call for reconsideration of the GEF resource allocation mechanism, comments on the effectiveness review of the GEF, and the GEF’s encouragement of involvement of indigenous peoples and local communities in its projects and decisions. In addition, SBI-2 discussions appeared to have examined the question of whether CBD-related activities could/should have access to funding from the Green Climate Fund, established under the UNFCCC. SBI-2’s recommendation includes a draft COP decision addressing all of these points.

With regard to operational funding, SBI-2 also considered the manner in which delegates from developing and less developed countries are assisted to participate in the meetings and work of the Convention, its protocols and other bodies. Typically, it gave the Parties opportunities to showcase their contributions and also to bemoan recent declines in the amount of contributions received. This discussion also considered issues relating to private-sector engagement, with one regional group “stress[ing that] support from the private sector should only come from entities that fully subscribe to the Convention’s objectives, and should not result in conflicts of interest”, and another reiterating prior calls for direct establishment of “conditions governing private sector engagement”. The resulting recommendation included relatively standard provisions.

Review and Assessment

Perhaps the most important of the SBI’s mandates is its obligation to examine and oversee the implementation and effectiveness of the CBD, its protocols and its other bodies, through the proper utilisation of review and assessment mechanisms. This is a particular challenge, because the preparations for the review are compiled and recommendations made by the CBD/Protocols Secretariat – the international body whose activities are most closely under the microscope – while the group adopting the recommendations is composed of national delegates, nearly all of whom are sectoral officials in their countries, and thus are some of the very people whose performance is being reviewed and assessed.

SBI-2 performed these functions through six recommendations – four general ones and two that were directed at the Cartagena Protocol, all of which are reported as non-contentious matters on which there was little discussion. The first focused on the value that a “volunteer peer-review process” could add to the review and assessment processes currently in use. It also referred to the upcoming review process in connection with SBI-3, and consideration of “options to enhance review mechanisms with a view to strengthening the implementation of the Convention”. A second recommendation generally discussed that coming effectiveness review, suggesting that the COP seek input from Parties regarding how it will be conducted, and mentioned the continuing need for previously requested input (annexed to the recommendation) on managing conflicts of interest in expert groups.

The three other recommendations under this category arise out of SBI’s internal coordination mandate – that is, its obligation to maximise coordination and minimise conflict and overlap between the three main CBD documents (the Convention, the Cartagena Biosafety Protocol and the Nagoya Protocol on ABS). Under this heading, SBI-2 adopted a general recommendation, which called for the three instruments to “commence synchronisation of their reporting cycles” with a goal of actual synchronisation by 2023. The recommendation specifically refers to “synergies at the national level” (collaboration between national focal points) and calls for an assessment of the cost implications of synchronised reporting from the Secretariat’s perspective. The SBI also adopted standard recommendations regarding the next COP’s adoption of reporting formats and commencement of the fourth reporting cycle under the Cartagena Protocol.

Operations and Coordination

The most direct “implementation” components of the SBI’s mandate relate to its responsibility to promote and support “operations” of the three instruments, and the manner in which they integrate with each other and with the rest of international law. In this connection, SBI-2 made three recommendations (also adopting two annexes) regarding the operation of the Nagoya Protocol on ABS, and two focused on inter-instrument cooperation.
Nagoya Protocol

Discussion regarding the effectiveness review of the Nagoya Protocol centred in part on whether such a review is timely. Although eight full years have passed since its adoption, and 26 since the CBD first required countries to adopt ABS measures, the fact remains that to date few countries have adopted ABS measures of any kind and fewer of those believe that their measures are functioning effectively or at all. This was reckoned to indicate a major need for capacity building, at minimum. It was also clear that the Nagoya Protocol’s effectiveness will continue to be minimal, until it can develop mutually supportive, functional and interactive mechanisms with other genetic-focused instruments, including the Cartagena Protocol, the International Agricultural Research Collections and FAO’s International Treaty on Plant Genetic Resources for Food and Agriculture. Ultimately, SBI-2 produced a recommendation that takes note of the assessment information, indicators and baseline, while calling for further development, feedback and coordination as necessary to make the Protocol functional.\(^3\) This recommendation annexed the outcome of the first test of whether the Nagoya Protocol can be made to function – the (somewhat disappointing) outcomes of COP/MOP’s initial inquiry into the need for and options for establishing a global multilateral benefit-sharing mechanism under the Nagoya Protocol\(^3\) – an issue that was also addressed in a separate recommendation (below). It also annexed a draft list of national performance “Indicators and Reference Points to Measure Progress” under the Protocol.\(^3\)

SBI-1 adopted another Nagoya-related resolution, in an attempt to assist with the Nagoya COP-MOP’s continuing inability to agree on whether they have complied with the Protocol requirement that they consider the need for and modalities of a global multilateral benefit-sharing mechanism to address the fair and equitable sharing of benefits derived from the utilization of genetic resources and traditional knowledge associated with genetic resources that occur in transboundary situations or for which it is not possible to grant or obtain prior informed consent.\(^3\)

Discussions centred around whether the time had come when sufficient information and views had been gathered, and a decision was needed, with positions on this question appearing to break across the developed/less-developed divide. Predictably, the SBI was no more able to reach consensus than the COP and COP/MOP had, and produced a recommendation that was well decorated with brackets,\(^3\) while both calling for a move ahead on developing the mechanism and further information gathering.

The third Nagoya-focused recommendation related to a concept known as “Specialized International ABS Instruments”, which arises from Article 4(4) of the Protocol:

*This Protocol is the instrument for the implementation of the access and benefit-sharing provisions of the Convention. Where a specialized international access and benefit-sharing instrument applies that is consistent with, and does not run counter to the objectives of the Convention and this Protocol, this Protocol does not apply for the Party or Parties to the specialized instrument in respect of the specific genetic resource covered by and for the purpose of the specialized instrument.*\(^3\)

This clause is directed at national implementation, suggesting that the States are each authorised to come to their own determinations regarding the meaning of undefined terms contained in it, and the identification of instruments which national law will recognise in this way. With the apparent goal of promoting international consistency, and purportedly the underlying goal of protecting the status of the FAO International Treaty on Plant Genetic Resources for Food and Agriculture, however, the SBI was tasked with considering a study and recommendation regarding the development of consensus on the meaning of “specialised international ABS instrument”. Several developed countries took the unexpected position that only “the Parties” can legitimately recognise specialised instruments. This position would appear to call for a reopening of negotiations – perhaps a subsidiary protocol regarding recognition – which is not the apparent intent of those Parties.
The SBI’s consensus decision on this point did not take such a controversial position. Instead, it rather meekly called for additional collaboration, study and collection of views, while reiterating the statement made in the Nagoya negotiations that the Protocol does not create any language creating a hierarchy among ABS instruments.36 That recommendation annexed a relatively generic list of possible criteria in the determination of which international instruments are included in Article 4(4).37

A Unified Approach to Cooperation

The discussions of the relationship between the Nagoya Protocol and other “specialised international instruments” brought the question of cooperation between the CBD bodies and “other conventions, international organizations, and partnerships” into sharp focus. This issue had been the subject of an “informal advisory group on synergies among biodiversity-related conventions”. In addition, the SBI’s raison d’être arises out of another cooperation goal: integration within the CBD “family” of instruments and bodies.

The two recommendations relating to these issues were generally non-contentious, except with regard to one point – the Working Group on CBD Article 8(j), which addresses the CBD’s call on Parties to respect, preserve and maintain knowledge, innovations and practices of indigenous and local communities embodying traditional lifestyles relevant for the conservation and sustainable use of biological diversity and promote their wider application with the approval and involvement of the holders of such knowledge, innovations and practices and encourage the equitable sharing of the benefits arising from the utilization of such knowledge, innovations and practices.38

On this topic, the Parties were apparently unable to determine which of the following to recommend:

• establishing a subsidiary body on Article 8(j);
• continuing the Working Group on Article 8(j) with an updated mandate; or
• “integrating the enhanced participation mechanisms used by the Working Group on Article 8(j) for the participation of IPLCs, when addressing matters of direct relevance to IPLCs in the Convention’s subsidiary bodies”.

The Parties were not able to come to agreement on this point, so omitted it from their final recommendation.39 That recommendation also brackets the mention of “The Rutzolijirisaxvoluntary Guidelines for the Repatriation of Traditional Knowledge of Indigenous Peoples and Local Communities Relevant for the Conservation and Sustainable Use of Biological Diversity”, which will be considered for adoption at COP-14.

The SBI’s recommendation with regard to cooperation with other conventions, international organisations and partnerships is relatively standard, but gives those receiving the recommendation notice of a number of ongoing activities toward which coordination/cooperation bridges should be built, including the following:

• The joint “Caring for Coasts” initiative with the CMS Secretariat;
• the SAMOA Pathway;
• the possibility of cooperation with the conventions of the Antarctic Treaty System relevant to biodiversity;
• the FAO’s work on the state of knowledge on soil biodiversity;
• options for coordination/consultation with UNESCO “with a view to preparing options for possible elements of work aimed at a rapprochement of nature and culture in the post-2020 framework”;
• on-going liaising with the World Trade Organization, including “following up on pending requests for observer status in relevant WTO committees”;
• cooperation with all relevant international and regional organisations and conventions working on marine litter and microplastics;40 and
• the Satoyama Initiative.41

Capacity Building

Inevitably, the SBI has also adopted a recommendation relating to capacity building, again giving the Parties the opportunity to highlight their various activities and contributions, including the Bio-Bridge Initiative, the Japan Biodiversity Fund, the InforMEA Initiative and the Global Taxonomy Initiative (GTI). [TRY]
Environmental Policy and Law, 48/5 (2018) 289

23 In this case, the comment was to bemoan the fact that the 5th Review was
13 July 2018.
19 SBI Recommendation 2/19 ("Proposals for a comprehensive and
18 See SBI Recommendation 2/3 ("Mainstreaming of biodiversity within and
15 SBSTTA-22 Recommendation 2. UN Doc. CBD/SBSTTA/REC/22/2. 6 July 2018.
13 July 2018.
2018.
13 July 2018.
20 Ibid.
23 In this case, the comment was to bemoan the fact that the 5th Review was not conducted due to lack of funds.
24 SBI Recommendation 2/7 ("Review of implementation of the financial mechanism (Article 21)"). UN Doc. CBD/SBI/REC/2/7. 13 July 2018.
31 Ibid., Annex I.
32 Ibid., Annex II.
33 Nagoya Protocol, Article 10.
35 Nagoya Protocol, Article 4(4).
36 SBI Recommendation 2/5 ("Specialized international access and benefit-sharing instruments in the context of Article 4, paragraph 4, of the Nagoya Protocol"). UN Doc. CBD/SBI/REC/2/5. 13 July 2018.
37 That list was taken from one of the "official" meeting documents – a "Study into Criteria to Identify a Specialized International Access and Benefit-Sharing Instrument and a Possible Process for Recognition of Such an Instrument". Having followed (and usually participated in) most of the negotiations of the ABS concept dating back to 1992, the author cannot resist remembering the extreme efforts FAO made to ensure that genetic resources for food and agriculture were included in CBD Article 15, and the equally extreme efforts to get a recognised exemption for them from the operation of any ABS mechanism in the following years.
38 CBD Article 8(j).
39 SBI Recommendation 2/16 ("Integration of Article 8(j) and provisions related to indigenous peoples and local communities in the work of the Convention and its Protocols"). UN Doc. CBD/SBI/REC/2/16. 13 July 2018. This was the Article 8(j) portion of the overall coordination resolution. The other parts are in SBI Recommendation 2/34 ("Enhancing integration under the Convention and its Protocols with respect to provisions related to biosafety and provisions related to access and benefit-sharing"). UN Doc. CBD/SBI/REC/2/34. 13 July 2018.

Basel Convention

The OEWG Prepares the Table for COP-14

by Keith Ripley

The eleventh meeting of the Open-Ended Working Group of the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal (OEWG-11) convened from 3–6 September 2018 in Geneva, Switzerland. Always meeting between sessions of the Convention’s biennial Conference of Parties (COP), the OEWG helps the COP develop and review the implementation of the Convention’s policies and workplan, and of specific COP decisions.

OEWG-11 adopted over a dozen decisions on a wide variety of legal, technical and strategic issues, including possible amendments to Convention annexes, e-wastes, wastes containing persistent organic pollutants (POPs), plastic wastes, wastes containing nanomaterials, household wastes, incineration, landfilling, electronic approaches to notification and movement documents, and harmonised customs descriptions and codes for particular waste streams.

Evaluation of the Strategic Framework

COP-10 adopted the Strategic Framework for the implementation of the Basel Convention, outlining the vision, guiding principles, strategic goals and objectives, and means to be used during the 2012–2022 period to improve implementation of the Convention, and general indicators for measuring progress in meeting the goals and objectives. COP-13 requested that the Secretariat and a small intersessional working group (SIWG) lay the groundwork for the final evaluation of the Strategic Framework by working on the indicators to be used in that evaluation.

OEWG-11 heard a progress report from the Secretariat and considered a draft compilation of information related to the indicators to be used for the preparation of the final evaluation of the Strategic Framework. The Working Group adopted a decision proposed by the Secretariat without amendment which requests the Secretariat, in consultation with the SIWG, to finalise the draft compilation of information on possible
indicators by 17 December 2018 for consideration by COP-14 when it convenes 29 April–9 May 2019.

Framework for Environmentally Sound Management (ESM)

In 2013, COP-11 adopted a framework for the environmentally sound management (ESM) of hazardous and other wastes to establish a common understanding of what this key principle of the Convention encompasses, and the tools and strategies that can be used to promote ESM. Most of this work involves the Secretariat and/or consultants, guided by a dedicated expert working group (EWG), preparing ESM guidelines, guidance and practical manuals for consideration and approval by the COP.

At OEWG-11, the Secretariat presented a document to update delegates regarding on-going work and presented a draft practical manual for stakeholders to ensure that notifications of transboundary movements meet ESM requirements; draft guidance to assist Parties in developing efficient strategies for the recycling and recovery of hazardous and other wastes; draft guidance on how to address ESM in the informal sector; and a revision of the draft practical manuals on extended producer responsibility (EPR) and financing systems for ESM.5

After a brief plenary discussion, this agenda point was referred to a contact group. The focus of contact group discussion was primarily the draft manuals on EPR and financing systems and the draft manual on notifications. On the former, most delegates supported the drafts with only minor editorial tweaks. Regarding the latter, participants offered comments on possible language regarding the exporting nation’s obligation to confirm the existence of a contract with the disposal facility; procedures involving transit States; and an advisory that the manual should not be used “in isolation” for consenting to or rejecting a transboundary movement. The contact group also agreed the manuals would benefit from another round of comment submissions by governments and others before COP-14.

The contact group prepared a recommendation with four annexes (one for each draft instrument).6 The OEWG-11 plenary adopted a less specific decision, which welcomed and encouraging the on-going work of the EWG tasked with intersessional work on the EPR manual, setting out a 31 October 2018 deadline for comments on the manuals and guidance, and noting that the EWG is slated to wrap up its work by 15 January 2019, so that the four products can be reviewed by COP-14.7

Technical Guidelines for ESM of Wastes Consisting of, Containing or Contaminated with Persistent Organic Pollutants (POPs)

Each time the Stockholm Convention on POPs takes a new regulatory action regarding a chemical, the Basel Convention is asked to update its existing general technical guideline for the ESM of wastes consisting of, containing or contaminated with POPs (first adopted at COP-8), and as needed, draft new technical guidelines or update existing ones to take into account the new Stockholm listings. These new or updated guidelines are usually prepared by a lead country volunteering to steer the effort, or the Secretariat and/or a consultant with guidance from a SIWG.

OEWG-11 had before it a draft update of the general technical guidelines, new technical guidelines regarding short-chain chlorinated paraffins (SCCP), plus updates of existing technical guidelines on wastes consisting of, containing or contaminated with hexachlorobutadiene (HCBD); hexabromodiphenyl ether and heptabromodiphenyl ether, and tetrabromodiphenyl ether and pentabromodiphenyl ether, to include decabromodiphenyl ether; unintentionally produced polychlorinated dibenzo-p-dioxins, polychlorinated dibenzofurans, hexachlorobenzene, polychlorinated biphenyls, pentachlorobenzene or polychlorinated naphthalenes, to include HCBD.8

The draft update of the general technical guidelines included proposals for provisional definitions of “low POP content” for all POPs regulated by the Stockholm Convention that would provide guidance for situations in which, under that convention, disposal need not destroy or irreversibly transform the POP content of the waste.9 In general this guidance uses values based on European Union (EU) legislation, since most non-EU nations have not adopted the low-POP-content concept in their waste disposal legislation or regulations.

During plenary discussion, Iran, Cameroon and the International POPs Elimination Network (IPEN) questioned the proposed provisional low-POP-content levels for specific chemicals, arguing that they were too high. IPEN also recommended certain changes in the text on destruction technologies.

The matter was referred to a contact group on technical matters, where most members supported the specific technical guidelines in their current form but a debate was held on low-POPs content. It was agreed to have deeper discussion on low-POPs content at the SIWG scheduled for October 2018 and let the SIWG make a recommendation to the COP.

The contact group reported, after which the OEWG adopted the entire contact group report (rather than the recommended decision contained in it) as its decision.10 The operative portion of that report (para. C.16) calls for completion of the revised technical guidelines by 31 October 2018, taking into account the OEWG-11 discussion and the SIWG’s October meeting deliberations. The resulting documents would then be open for comment by Parties and observers by 15 February 2019, and the draft guidelines and compilation of comments be submitted to COP-14 for consideration.

Technical Guidelines on Transboundary Movements of E-Waste

In 2015, COP-12 adopted interim technical guidelines on the transboundary movement of electrical and electronic waste (e-waste) and used electronic
The OEWG decided to invite Parties and others to submit comments on the draft guidelines by November 2018, and asked the co-leads to update by 15 February 2019 the guidelines in light of OEWG-11 comments and written comments submitted, for consideration by COP-14. China noted that it is important to revise and update these technical guidelines until COP-14 after an intersessional EWG work programme. COP-13 decided to delay finalising the guidelines until COP-14 after an intersessional EWG work programme. COP-13 asked OEWG-11 to consider whether to update two other existing technical guidelines: D9, on hazardous waste physico-chemical treatment, and D8, on biological treatment. OEWG-11 only held a brief discussion on this topic in which it quickly emerged that, while most agreed these guidelines needed to be updated, the work should be postponed until the 2020–2021 biennial OEWG work programme. OEWG-11 Co-Chair, Justina Grigaravičiene (Lithuania), said that the meeting record would reflect general support for considering updates of the guidelines, but to do so in the next biennium.

**Technical Guidelines on Incineration and Landfill**

In April 2017, COP-13 decided to update two existing Basel Convention technical guidelines: D10 on incineration on land, and D5 on specially engineered landfill. Intersessional work on updating these was led by Argentina and Canada and presented by the Secretariat to OEWG-11. The EU supported extending the scope of both guidelines and expressed hope that the revised technical guidelines could be adopted by COP-14. China noted that it is important to revise and update these technical guidelines to reflect modern standards and urged countries to nominate additional experts to the group to further assist in the revision of these guidelines. Indonesia, Kenya, Namibia, Nigeria and Senegal supported the work to revise these technical guidelines.

The contact group on technical matters drafted a decision based on a proposal by Argentina and Canada which was adopted without amendment by the OEWG. After the decision’s adoption, the EU read a statement for the record saying that COP-14 should consider extending the scope of D10 to also cover energy recovery (recovery operation R1), and the scope of D5 to also cover all kinds of landfiling of hazardous wastes and other wastes and permanent underground storage, taking into account the progress on reviewing possible changes to Convention Annex IV (see below).

The OEWG decided to invite Parties and others to submit comments on the draft guidelines by November 2018, and asked the co-leads to update by 15 February 2019 the guidelines in light of OEWG-11 comments and written comments submitted, for consideration by COP-14.

**Technical Guidelines on Hazardous Waste Physico-chemical Treatment and Biological Treatment**

COP-14 asked OEWG-11 to consider whether to update two other existing technical guidelines: D9, on hazardous waste physico-chemical treatment, and D8, on biological treatment. OEWG-11 only held a brief discussion on this topic in which it quickly emerged that, while most agreed these guidelines needed to be updated, the work should be postponed until the 2020–2021 biennial OEWG work programme. OEWG-11 Co-Chair, Justina Grigaravičiene (Lithuania), said that the meeting record would reflect general support for considering updates of the guidelines, but to do so in the next biennium.

**Guidance for Inventories Used in National Reporting**

Recent OEWG sessions have been asked by the COP to draw up lists of particular waste streams for which practical guidance on the development of national inventories would be useful. As the result of contact group discussions during the week, the OEWG adopted a recommendation indicating that the development of guidance documents on plastic waste; obsolete pesticides, including pesticide-container waste; and waste batteries containing lithium be accorded high priority. It recommended that “medium” priority be assigned to guidance on waste ink and toner cartridges, and olive oil milling waste. It recommended that COP-14 consider requesting the Secretariat to develop practical guidance for the aforementioned waste streams for consideration by COP-15.

**Electronic Approaches to the Notification and Movement Documents**

On Monday, the Secretariat introduced notes on electronic approaches to the notification and movement documents, and on information submitted by Parties and others on their experiences with such electronic approaches.

All Parties and observers making interventions spoke in favour of electronic approaches and the draft decision proposed in the Secretariat’s note, which was adopted without amendment. The decision requested the Secretariat to prepare a report for consideration by OEWG-12 on national and international experiences in developing and implementing electronic systems for exchanging information on or controlling the movements of goods and wastes, and lessons learned from such experiences. The decision also asked the Secretariat to organise workshops in the five UN regions to explore options for a Basel Convention system and their benefits and requirements, and report on their outcomes to OEWG-12, which would develop a recommendation for COP-15 consideration in 2021.

**Plastic Waste**

Last December, the Third United Nations Environment Assembly (UNEA-3) invited the Basel Convention,
among other multilateral environmental agreements (MEAs), to increase their action to prevent and reduce marine litter and microplastics and their harmful effects. Prior to that request, Basel COP-13 had already asked the OEWG to consider relevant options available under the Convention and develop a proposal for consideration by COP-14.

OEWG-11 considered this issue in plenary, focusing on three prongs: the Secretariat’s proposals for options for action under the Convention, and Norwegian proposals on creating a broader plastic-waste-focused Convention Partnership and on reclassifying solid plastic waste in the Convention annexes. During the plenary, there was general consensus that the problem of marine plastic litter and microplastics needed addressing at the international level, and that the Basel Convention has legal competence to act on the issue. The contact group on technical matters was assigned to discuss all three approaches in greater detail.

**Marine Plastic Litter and Microplastics**

The options paper submitted to OEWG-11 by the Secretariat suggested possible elements for a COP decision, including to:

- invite Parties to the Stockholm Convention and other stakeholders to address substances that may pose a risk through their presence in marine plastic litter and microplastics;
- consider whether any additional plastic constituents or characteristics should be added to the Basel Convention’s Annex I or Annex III;
- consider whether any new categories of waste should be listed in Annex II;
- consider an update of the 2002 technical guidelines on the sound management of plastic wastes;
- consider establishing a mechanism to monitor implementation of the technical guidelines on plastic wastes;
- encourage Basel and Stockholm Convention Regional Centres and the Secretariat to continue activities already started on the issue;
- request the joint clearing-house mechanism to gather information about regional and national initiatives regarding marine plastic litter and microplastics;
- consider developing voluntary indicators, targets, timelines and reporting mechanisms on reductions in plastic waste generation, so as to enable the monitoring of progress toward waste minimisation at national and global levels;
- consider development of practical guidance on the development of inventories for plastic waste streams for enhancing national reporting.

The contact group discussed these options, particularly the idea of possible amendments to the definition of wastes covered by the Convention, including the possibility of adding waste constituents or characteristics that should be considered hazardous, and whether to update the 2002 technical guidelines on plastic waste and then attempt to monitor their implementation.

The resulting OEWG recommendation adopted the text suggested by the contact group without amendment. It sets out draft elements for a COP-14 decision on marine plastic litter, including:

- encouraging governments, industry and consumers to make efforts to prevent and minimise the generation of plastic waste and improve the ESM of plastic waste, in particular in order to prevent plastics from entering the marine environment from land-based sources;
- considering whether any additional constituents or characteristics should be added to Annex I or Annex III respectively, through the on-going work by the expert working group on review of annexes;
- deciding to update the 2002 technical guidelines;
- requesting the Household Waste Partnership to coordinate closely with the new partnership on plastic waste to be established;
- considering what data should be gathered, and by whom, related to the generation, disposal of, and transboundary movement of plastic wastes in different waste streams, the environmental, economic and social impact of plastic wastes; and national policies and progress towards the ESM of plastic wastes.

**Proposals to Amend Convention Annexes Regarding Plastic Waste**

Under a procedure adopted by COP-8, Parties can apply for review or adjustment of the lists contained in Convention Annexes VIII (hazardous waste) and IX (waste not normally considered hazardous) by submitting a special form to the Secretariat at least three months prior to an OEWG meeting, which must review the application before making a recommendation to the COP. Following this procedure, Norway submitted in June 2018 an application for the removal of entry B3010 (solid plastic wastes) from Annex IX.

The Secretariat formally presented to the plenary a Norwegian proposal on Annex IX, after which Norway presented a new proposal to create a new category Y48 for solid plastic waste under Annex II (wastes requiring special consideration). Many countries thanked Norway for making the proposals and Congo, El Salvador, Kenya and Palestine expressed specific support for the proposals themselves.

After further deliberation in the contact group on technical matters, the OEWG adopted a decision that recommends that COP-14 consider the Norwegian proposal for amendment of Annex IX and takes note of Norway’s intention to submit a formal proposal to COP-14 to amend Annex II.

**Proposal for a Partnership on Plastic Waste**

Norway also outlined a proposal to establish a new Basel Convention partnership on plastic waste. Many delegations thanked Norway for the proposal, and several expressed support. The EU expressed support for a partnership approach, but cautioned against duplication of effort with the Household Waste Partnership.
The matter was referred to the contact group on technical matters, which drafted terms of reference (ToR) for a partnership on plastic waste using Norway’s proposal as a starting point after lengthy discussion of the mandate and tasks of the new partnership and how it might interact with the existing Partnership on Household Waste.

OEWG-11 decided to recommend the partnership, noting that it should cover all plastic waste at all life-cycle stages, and seek to promote and improve the ESM of plastic wastes and minimise their generation.29 It included the draft ToR, which list seven agreed tasks for the partnership:

- undertake and/or contribute to outreach education and awareness-raising activities;
- collect information to undertake analysis of, and disseminate widely, possible solutions to barriers to plastic recycling;
- collect information and undertake analysis on environmental, economic and social impacts of initiatives;
- transfer knowledge, experiences and information;
- undertake pilot projects;
- monitor transboundary movements of plastic wastes;
- encourage research and development.

Bracketed text (indicating disagreement) would have the partnership control transboundary movements of plastic waste, and provide assistance and capacity building at the domestic level to strengthen policies, regulations and strategies to improve plastic waste management. COP-14 likely will negotiate on these two points of disagreement.

Waste Containing Nanomaterials

The 2018–19 OEWG work programme included, at the request of several Parties, a call for the Secretariat to identify issues related to waste containing nanomaterials that may be relevant to work under the Basel Convention and options for further work.

OEWG-11 welcomed the Secretariat’s report and options paper,30 and many delegations indicated the need for Convention work in this field. A contact group on technical matters prepared a draft recommendation based on text suggested by the EU, which was adopted in plenary and then sent to the Technical Matters Contact Group for additional discussions on the way forward. The OEWG adopted a decision inviting Parties and others to submit comments on the report by 31 January 2019; and requesting the Secretariat to compile the comments received, for consideration by COP-14.

Consultation with the Committee Administering the Mechanism for Promoting Implementation and Compliance

In previous OEWG sessions, the Basel Convention’s Committee Administering the Mechanism for Promoting Implementation and Compliance (ICC) has consulted the OEWG for input on guides and guidance under development. OEWG-11 had before it the ICC’s draft work programme and four draft ICC products: revised draft guidance to improve the implementation of paragraph 11 of Article 6 of the Convention on insurance, bond and guarantee; revised draft guidance on improving national reporting; a revised draft guide for the development of national legal frameworks to implement the Convention; and draft guidance on the implementation of paragraph 4 of Article 6 of the Convention on transit transboundary movements.

The matter was referred to the contact group on legal matters, which used EU text proposals as the basis for feedback on the ICC work programme and the four draft guidances. The resulting decision invited the ICC to consider preparing a revision of the draft guidance on transit transboundary movements taking into account OEWG-11 comments and inviting further comments from Parties and others, for consideration and adoption by COP-14. It also invited the ICC to finalise the other guidance by taking into account its consultation with OEWG-11, in time for consideration and possible adoption by COP-14.31

Review of Convention Annexes

In 2015, COP-12 decided that four of the nine annexes to the Basel Convention (those that address waste categories and operations)32 should be reviewed and possibly amended to identify and address any conflicts or overlaps among them, as well as to update provisions or include new waste streams and/or disposal operations. In 2017, COP-13 established an EWG to take on this task.33

OEWG-11 heard a report34 from the EWG co-chairs on the group’s work to date and on the way forward.35 The Group proposed working on and submitting three recommended revisions. Within the annexes to which the COP had referred, it proposed developing amendments to Annex IV and to entry B1110 (electrical and electronic assemblies) of Annex IX. In addition, it proposed work on amending entry A1180 (waste electrical and electronic assemblies) of Annex VIII (hazardous waste). It also proposed asking COP-14 to consider whether to review Annexes II, VIII and IX.

In the plenary debate that followed, general support was expressed for the approach outlined in the conference room paper (preliminary draft of the decision), although different delegations indicated their preferences on sequence and/or priorities. Only the US, an observer, voiced concern about the number and range of revisions being discussed, and suggested it was premature to conduct a full review of Annexes II, VIII and IX.

The contact group on legal matters further explored the details in the CRP, and decided to recommend extending the EWG’s mandate to assess the implications of reviewing Annexes I, III, IV and related aspects of IX, and their possible impacts on things such as notification and movement documents.

Ultimately, OEWG-11 adopted the contact group’s report as its decision.36 The resulting decision, inter alia, requests the EWG to continue its work on the review of annexes and to prepare recommendations for
revisions to Annex IV and Annex IX (B1110) for consideration by COP-14, including a further open round of comments facilitated by the Secretariat;

• recommends that COP-14 consider including the review of entry B1110 and mirror entry A1180 in the ToR of the EWG;

• suggests that COP-14 consider extending the mandate of the expert working group to assess the implications of the review of Annexes I, III and IV for other annexes and for relevant decisions of the COP, including those on notification and movement documents and the reporting format, and to report its findings to OEWG-12.

Basel Convention Partnership Programme

Since COP-6, the Basel COPs have endorsed the idea of engaging in voluntary public-private partnerships to further the Basel Convention agenda and reach. The current Partnership Programme follows guidelines set by COP-10,37 which envisions two types: global partnerships established by the COP in which the Secretariat plays a facilitating role and provides expertise; other partnerships established by other bodies where the Secretariat can participate to promote Convention guidelines and tools, and raise awareness and visibility of the Convention.

OEWG-11 dealt with four issues involving the Programme: the above-mentioned Norwegian proposal to create a new partnership on plastic waste; a review of progress made by the Partnership on Household Waste; a proposal for follow-up to the disbanded Partnership for Action on Computing Equipment (PACE); and a discussion on future development of the Programme.

Partnership on Household Waste

COP-13 created a Partnership on Household Waste, adopted its ToR, and asked it to implement a work plan calling for development of an overall guidance on ESM of household waste.38 At OEWG-11, the Secretariat introduced the draft modules for the overall guidance document on ESM of household waste39 and Partnership Co-Chair, Gabriella Medina (Uruguay), reported on the group’s work to date and the timetable for further work.

The EU proposed that a draft decision on the Partnership call for including plastic wastes in its work programme and submitted a CRP with draft language on the Partnership.40 Some delegates preferred that the proposed Partnership on Plastic Waste (see above) take the lead on this issue, and warned against duplication of roles, responsibilities or work, but disagreed on how to appropriately refer to coordination and collaboration with the proposed Partnership on Plastic Waste, since only the COP can decide whether it will exist or not.

In the end, OEWG-11 accepted an amended version of this proposal as a guide for further work. It deleted language that requests the Partnership to “put emphasis on its work on plastic waste”.41 The posted OEWG-11 partnership decision, however, merely “Welcomes the progress made by the household waste partnership working group on the draft modules for the overall guidance document on the environmentally sound management of household waste and requests it to revise the draft modules by 17 December 2018”, taking into account the OEWG-11 discussions in time for COP-14 consideration.

Possible Follow-up to PACE

COP-13 disbanded PACE, having concluded that the partnership had successfully completed its mandate, and invited the Secretariat and the Basel Convention Regional Centres to take the lead in developing a possible follow-up to PACE.42 At OEWG-11, the Argentina Regional Center described the activities of the various regional centres with regard to a possible follow-up partnership to PACE. Sudan introduced a draft decision on such a partnership, co-sponsored by Argentina, Norway, Panama and Switzerland.43 During the week, the contact group on strategic matters worked on the proposal, which finally included the following elements:44

• welcomes the establishment by the Regional Centres in South Africa, Argentina, Senegal and Slovakia of an interim group on a follow-up partnership to PACE;

• invites Parties, signatories, and all stakeholders, manufacturers, recyclers, refurbishers, academia, non-governmental and intergovernmental organisations, including the former members of PACE, to engage in the work of the interim group;

• notes that the interim group intends to develop recommendations for COP-14 consideration, including a concept note, ToR and a draft workplan for 2020–2021;

• notes that the interim group intends to identify, encourage and, if possible, facilitate balanced and diverse participation by private-sector and other stakeholders in the follow-up partnership; and explore mechanisms for providing sustainable and predictable financial support for a follow-up partnership;

• requests the interim group to report to COP-14, through the Secretariat, on progress.

Further Developing Partnerships

When the Secretariat introduced the document on this topic,45 it noted that it had received a financial contribution from Switzerland to prepare a report evaluating past and on-going partnerships which it would submit for COP-14 consideration. The EU expressed interest in dialoguing with the Secretariat regarding the evaluation, and Iran proposed creating a new partnership on the issue of used lead-acid batteries.

In the end, OEWG-11 adopted the decision drafted by the EU that requests the Secretariat to finish and circulate its report for comment by 15 November 2018, and to include recommendations on opportunities to further develop partnerships under the Basel Convention, taking into account the experience of relevant UN bodies, such as the Economic and Social Council, UN Environment Programme, and the Food and Agriculture Organization, as well as other MEAs such as the Stockholm and Rotterdam Conventions. The decision asks Parties and
observers to provide comments on the report by 15 January 2019 for consideration by COP-14.46

Cooperation with the World Customs Organization (WCO)

Regarding another on-going issue, the Secretariat reported on cooperation with WCO regarding the Harmonized Commodity Description and Coding System (“Harmonized System”),47 noting progress in harmonised e-waste codes. Canada suggested inviting Parties to indicate their priorities for waste types that should be given codes in the Harmonized System; others suggested waiting until after the review of Convention annexes underway (see above).

The OEWG decision requests the Secretariat to prepare a revised list of waste types needing codes by 30 September 2018, and Parties to indicate the items for which it would be useful to request the WCO to introduce codes in the Harmonized System, ranked in order of priority. The prioritised list will be submitted to COP-14.48

Outlook

OEWG-11 closed on an upbeat note, with many participants praising the progress made on plastic waste, review of Convention annexes, the many technical guidelines under review, and the Convention’s Partnership Programme. Work remains to be undertaken on all issues by the Secretariat and the various SIWGs and EWGs in the run-up to COP-14 in April 2019.

In all likelihood, the issues that will take centre-stage at COP-14 will be the various plastics initiatives, including Norway’s proposal to reclassify solid plastic waste in the Convention annexes, and the proposals for reviewing and possibly amending several annexes, although there were indications at OEWG-11 that some nations intend to bring up issues they have with the low-POPs content, e-waste and landfilling. The EU also indicated it might try again at COP-14 to assign some part of the mandate for work on the plastics issue to the Partnership on Household Waste.

Notes

4 UNEP/CHW/OEWG.11/2.
5 UNEP/CHW/OEWG.11/INF/3–8, respectively.
6 UNEP/CHW/OEWG.11/CRP.6 and /Add.1–4. These documents are not available in the above listed website.
7 UNEP/CHW/OEWG.11/5.
9 Article 6, para. 1(d).
10 UNEP/CHW/OEWG.11/4, Part II.
11 Technically, the guidance addressed “the development of inventories of used lead-acid batteries, of electrical and electronic waste and of waste oils”.
12 Supra, note 2.
14 UNEP/CHW/OEWG.11/5.
15 UNEP/CHW/OEWG.11/INF/18–19.
16 UNEP/CHW/OEWG.11/4, Part III.
17 Supra, note 2.
18 UNEP/CHW/OEWG.11/5.
20 UNEP/EA.3/Rec.7. UNEA-3’s resolutions are available online at http://web.unep.org/environmentassembly/node/41405.
21 Supra, note 2.
22 UNEP/CHW/OEWG.11/INF/22.
23 UNEP/CHW/OEWG.11/7. Although posted on the website as a final decision, this document is still in the form of a preliminary version of the Contact Group’s recommendation, including language noting that “the OEWG may wish to consider” certain decisions, and omitting to include, attach or describe attachments mentioned in the “decision”.
24 This list is not available in the documents posted online.
25 UNEP/CHW/OEWG.11/14 and INF/36.
27 UNEP/CHW/OEWG.11/14.
28 An INF document regarding such a proposal is online as UNEP/CHW/OEWG.11/INF/39.
29 UNEP/CHW/OEWG.11/CRP.20 (not available online). Although not included in the posted decision, they form the main text of UNEP/CHW/OEWG.11/INF/39.
32 The four annexes under consideration are: Annex I (categories to be controlled); Annex III (hazardous characteristics); Annex IV (disposal operations); and related aspects of Annex IX (wastes that will not be considered hazardous unless they contain enough Annex I material to exhibit an Annex III hazardous characteristic). The EWG apparently also considered amending Annex VIII and extending the portions of Annex IX to be considered.
33 Supra, note 2.
34 UNEP/CHW/OEWG.11/INF/30.
35 UNEP/CHW/OEWG.11/10.
36 UNEP/CHW/OEWG.11/10. As noted regarding a few other decisions, the report was adopted as-is, and it is assumed that the OEWG intended to adopt the operative recommendations which this document says it “may wish to adopt” (para. 14).
38 Supra, note 2.
39 UNEP/CHW/OEWG.11/INF/33.
40 UNEP/CHW/OEWG.11/CRP.19. This document is not available on the Convention website.
41 UNEP/CHW/OEWG.11/11.
42 Supra, note 14.
43 UNEP/CHW/OEWG.11/CRP.5. This document is not yet available on the Convention website. The Secretariat’s report on this agenda item is available as: UNEP/CHW/OEWG.11/INF/32.
44 UNEP/CHW/OEWG.11/CRP.11. This document is not yet available on the Convention website.
45 UNEP/CHW/OEWG.11/11.
46 UNEP/CHW/OEWG.11/11, para. 11.3.
47 UNEP/CHW/OEWG.11/INF/34.
48 UNEP/CHW/OEWG.11/129.
A Judicial Reminder of the Limits of “Declarations” and “Resolutions” of International Bodies

In October 2018, the International Court of Justice (ICJ) in The Hague issued its judgment on a claim by the government of Bolivia, alleging that Chile had an obligation to negotiate a solution to the long-standing challenges posed by Bolivia’s situation as a landlocked nation. In general, the Court’s judgment provides a relatively standard recitation of the international public law elements of the intent to be bound to a commitment to negotiate. Beyond that, however, this decision also provides a reminder to environmental negotiators regarding how international law and diplomacy views the sorts of documents (“international declarations”, “COP resolutions” and other formally issued statements of intention) that are often cited by international environmental negotiators as “milestones” in the quest for international action.

Background
The case revolved around an international recognition of the need to provide Bolivia with access to the Pacific Ocean, and the long and unsuccessful efforts to achieve this goal to date. Since 1904, when a peace treaty between Chile and Bolivia ended what had been named the “war of the Pacific” without preserving Bolivia’s previous coastal access, the two countries have been making regular attempts to address Bolivia’s ocean-access challenge, and various intergovernmental bodies have adopted resolutions regarding the need for a solution. In addition to the 1904 Peace Treaty, scattered over the 114 intervening years, the ICJ judgment identifies two declarations, two formal diplomatic memorandums, two memorials of direct negotiations, at least two exchanges of communiqués, a formally recognised “13-Point Agenda”, appeals to or from other governments and several resolutions of international bodies, all of which address the issue in some way. In April 2013, Bolivia filed its application, instituting proceedings against Chile.

Elements of the Judgment
After finding jurisdiction to consider Bolivia’s submission, the Court first established the primary question under consideration – whether Chile had an obligation to negotiate with Bolivia regarding potentially finding a solution that gives it sovereign access to the Pacific. It began by pointing out that a duty to negotiate is not a duty to come to a negotiated agreement, but only a duty to engage in good-faith negotiations. Quoting a preliminary judgment in this case, it noted:

*Bolivia does not ask the Court to declare that it has a right to sovereign access to the sea. What Bolivia claims in its submissions is that Chile is under an obligation to negotiate “in order to reach an agreement granting Bolivia a fully sovereign access”.... [T]his alleged obligation does not include a commitment to reach an agreement on the subject-matter of the dispute.*

It also discussed the concept of “sovereign access”, citing Bolivia’s definition of this concept, while apparently acknowledging that this definition was not the Court’s definitive word on the concept:

*Soberne access exists when a State does not depend on anything or anyone to enjoy this access.... Sovereign access is a regime that secures the uninterrupted way of Bolivia to the sea – the conditions of this access falling within the exclusive administration and control, both legal and physical, of Bolivia.*

In general, the Court’s judgment was not exceptionally noteworthy, having been simply a careful analysis of specific recorded statements and instruments, concluding, albeit with some disagreement, that none of them contained a clear indication of Chile’s numerous statements of “willingness” to begin “formal” negotiations were mere political rhetoric. Unfortunately,
Bolivia’s election to file its application at this point probably precludes any ability to seek a better conclusion regarding the interpretation of these statements and instruments, should the international legal/political climate shift again to a more liberal perspective on such claims in the future.

Of greatest interest to EPL’s readership are the Court’s comments on three relatively minor points: resolutions, decisions and declarations of international bodies; alternate means of resolving Bolivia’s landlocked challenge; and estoppel.

Resolutions, Decisions and Declarations of International Bodies

In most international environmental negotiations and meetings of bodies such as conferences of parties, a significant portion of the governmental and non-governmental delegations consists entirely of individuals with little or no experience in either international law or diplomacy – individuals chosen for their pre-eminence in relevant scientific and practical fields. This delegation composition leads to two common problems, usually both present in each such delegate:

• a belief that every document adopted by the body must be negotiated in excruciating detail, because “every word matters”; and
• general unawareness of the reasons that word choice might matter – i.e., of the legal impact of the words finally adopted.

As a result, despite the exponential increase in such documents and in the length of each, resolutions and declarations are misunderstood, and many are only marginally effective, containing only very general legal language. Such documents, however, are sometimes hailed as major accomplishments, where their actual legal and practical impact may be nil.

In Bolivia v. Chile, Bolivia identified several declarations and resolutions adopted by the Organization of American States and other international bodies of which Chile was a participating member, claiming that they were indicators that Chile had an internationally recognised duty to negotiate regarding Bolivia’s sovereign access to the Pacific. The Court looked in detail at five such resolutions,7 included a recognition of the fact that “Bolivia’s landlocked status was a matter of ‘concern throughout the hemisphere’”, as well as a call to seek solutions. The court noted that, during the body’s consideration of some of these resolutions, Chile’s delegate commented on or objected. In many of its recorded comments, Chile had noted that it recognised the need for a negotiated solution, but indicated that such matters should be dealt with by direct negotiations between the two countries involved and objected to OAS’s efforts to become involved. The Court reiterated the general rule for evaluating such documents – that most of them are not binding, indicating only a general non-plenipotentiary agreement that some action, choice or viewpoint is recommended, encouraged or permitted, but not in any way mandated. The Court specifically stated that such documents are “not per se binding, and cannot be the source of an international obligation” 8

Other Means of Resolving Inter-Country Challenges

In this connection, Bolivia cited Article 3 of the OAS Charter, which it claimed enunciated a positive obligation to “submit disputes to the peaceful procedures identified”.9 It cited similar language in the UN Charter,10 requiring that international disputes be settled by peaceful means “in such a manner that peace and security and justice are not endangered” and claiming that these provisions reflect “a basic principle of international law” and impose a positive obligation.

In response to this claim, Chile agreed that the UN Charter imposes an obligation to settle disputes via “peaceful means”, but opposed any indication that this mandates negotiation. While negotiations are one of the methods for settling disputes peacefully, Chile’s view was that they do not have to be preferred over “other means of peaceful settlement”.11 The court ultimately agreed that no particular “peaceful means” is identified in either charter and listed other options: “enquiry, mediation, conciliation, arbitration, judicial settlement, resort to regional agencies or arrangements…and other peaceful means of the parties’ choice”. It is notable that this list breaks down into two groups – the means that must be selected by agreement between the conflicting parties (i.e., by negotiation) and those that may be selected and initiated by one party. In effect, this conclusion is, at best, explaining to Bolivia that it may need to phrase its claim differently, seeking judicial intervention in the form of a specific decision granting Bolivia a specified access, rather than its milder effort to request good-faith negotiation.

Estoppel

The other discussion of potential interest for environmental negotiators and diplomats is the Court’s discussion of the question of estoppel. Bolivia raised estoppel arguments using four different formulations, each submitted as a separate argument, but all given similar treatment:

• Formal estoppel – i.e., that Chile expressed willingness to negotiate in a way that induced Bolivia to rely on that statement to its detriment;
• Acquiescence – i.e., that Chile did not negate statements and situations that would have required a response, if Chile did not agree;
• Legitimate expectations – i.e., a claim made more often in business situations, where a statement by one party gives the other party reason to expect certain returns; and
• Cumulative statements and situations – i.e., as noted above, the multitude of statements, documents and other indications that negotiations would occur, giving rise to a de facto obligation.

It would not be surprising to hear that the Court did not accept any of these arguments, apart from one factual point – Chile noted its intention to negotiate in the
context of requests by third-party countries to help resolve the situation, as uninterested facilitators. Although the Court’s summaries of these events were not detailed (so that the author may be interpreting them incorrectly), it appears that more than one uninvolved country and more than one intergovernmental body indicated willingness to help in the development of a negotiated solution. In each of these, Chile appears to have noted that the matter was one that should be decided in a two-party negotiation, and that it was willing to undertake such a negotiation, at which point Bolivia appears to have stood down, as did the party or body offering help. The Court’s discussions of estoppel, expectations, acquiescence and cumulative impact did not consider the value of these foregone offers, which were possibly rejected and/or withdrawn in the expectation that Chile was committing to come to the negotiating table. On denying Bolivia’s express estoppel argument, the Court specifically cited an aspect of a previous decision that appeared nearly identical to the current case:

When examining whether the conditions laid down in the Court’s jurisprudence for an estoppel to exist were present with regard to the boundary dispute between Cameroon and Nigeria, the Court stated: “An estoppel would only arise if by its acts or declarations Cameroon had consistently made it fully clear that it had agreed to settle the boundary dispute submitted to the Court by bilateral avenues alone”.

It also noted that in the cited case there had been no indication of detrimental reliance by Nigeria. It did not consider whether Bolivia’s dropping of its discussions with these foreign bodies or others constituted detrimental reliance in the present case.

Conclusion

Ultimately, the Court concluded in a split (9–3) decision, that evidence did not support Bolivia’s claim that Chile had an “obligation to negotiate with Bolivia in order to reach an agreement granting Bolivia a fully sovereign access to the Pacific Ocean”. The Court expressed this conclusion with an over-optimistic view, however, noting that:

the Court’s finding should not be understood as precluding the Parties from continuing their dialogue and exchanges, in a spirit of good neighbourliness, to address the issues relating to the landlocked situation of Bolivia, the solution to which they have both recognized to be a matter of mutual interest. With willingness on the part of the Parties, meaningful negotiations can be undertaken.

In his separate decision, President Yusuf underscored this implied call for negotiation:

It is possible, as is the case here, that the Court may reject the relief requested by an applicant because it is not sufficiently founded on law. This may satisfy the judicial function of the Court, but it may not put an end to the issues which divide the Parties or remove all the uncertainties affecting their relations. It is not inappropriate, in such circumstances, for the Court to

Notes

2 Ibid., paras 88–89 (citations omitted).
3 Ibid., para. 90. In noting that these definitions were the ones Bolivia presented in oral argument, the Court also noted that “The term ‘sovereign access’ as used in Bolivia’s submission, could lead to different interpretations” (emphasis added). In his dissenting opinion, Judge Robinson defined sovereign access as follows: “Sovereign access is the cession by Chile to Bolivia of a part of its territory over which Bolivia will have sovereignty and which gives Bolivia access to the Pacific. In the circumstances of this case, the Court has to determine on the basis of the material before it whether Chile has an ‘obligation to negotiate in good faith and effectively with Bolivia in order to reach an agreement granting Bolivia a fully sovereign access to the Pacific’”. Dissenting Opinion of Judge Robinson, at para. 9.
4 Judges Robinson and Salam, as well as Judge ad hoc Daudet, all expressed disagreement with at least one of these conclusions. Their dissenting opinions are all available online at https://www.icj-cij.org/en/case/153/ judgments.
Regulating Marine Biodiversity in Arctic Areas Beyond National Jurisdiction

by Kamrul Hossaini and Miriam Czarskiii

Over the last few decades, the Arctic has attracted growing interest and also concern. In particular, with rapid climate change, the future of the Arctic has become a major topic of discussion within the region and beyond, among environmentalists, indigenous communities, multinational companies and governments.

All land areas within the Arctic Circle are within national jurisdictions. Therefore, discussions of Arctic governance focus on the Arctic Ocean. There are two groups of States that have primary interest in these discussions: the five coastal States surrounding the Arctic Ocean – Canada, Denmark (Greenland), Norway, Russia and the US (collectively known as the “Arctic Five”) – and three non-coastal States – Finland, Iceland and Sweden – that are also included since parts of their territories fall within the Arctic Circle. These eight countries are referred to herein as the “Arctic States”.

The Arctic is a pristine environment with unique marine and terrestrial biodiversity. It is also home to various indigenous communities whose livelihoods are intrinsically connected to their natural surroundings.

The Arctic’s distinctiveness calls for a tailored approach to Arctic governance. It is, however, unlike Antarctica, in that there is currently no single governance mechanism pertaining to the Arctic as a whole. Rather, a number of international and regional instruments play a role in Arctic governance, including, particularly, the United Nations Convention on the Law of the Sea (UNCLOS) which guides all activities in the Arctic Ocean. The Arctic Council – a high-level intergovernmental forum established by all eight Arctic States – constitutes, at present, the main forum for discussions about the future of the Arctic.

One approach that has been proposed to protect marine biodiversity is the designation of marine protected areas (MPAs). Although the use of the concept in international policy is heavily debated, it appears that MPAs could be established in the Arctic. The key question, however, is which legal instruments could be used to create and implement MPAs encompassing waters and ice-cap areas beyond national jurisdiction. Currently, UN negotiations have begun regarding a possible treaty for the sustainable use of marine biodiversity in ocean areas beyond national jurisdiction (the “BBNJ Negotiations”).

This article examines options for the future protection of marine biodiversity in Arctic areas beyond national jurisdiction, including both the high seas and the seabed beyond the Arctic Five’s formally declared outer continental shelf areas. Given that the BBNJ Negotiations could potentially provide support for the creation of MPAs in the Arctic, that approach constitutes the main focus of this paper; however, it will also consider the possibility that the BBNJ Negotiations may or may not succeed in taking proper account of the uniqueness of Arctic marine fauna and the urgent need for its protection.

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will also present an alternative strategy, in case the BBNJ Negotiations fail to address Arctic concerns or proceed too slowly. Specifically, it will discuss the establishment of a Regional Seas Programme (RSP) for the Arctic – an international process that could be negotiated under the auspices of the Arctic Council, and in which either the Arctic Five or all eight Arctic States could take the lead.

Uniqueness of Arctic Marine Biodiversity

The marine biodiversity of the Arctic Ocean is unique and very fragile. Arctic species are adapted to dark, frigid and quiet waters. Food webs in Arctic waters can contain as many as six trophic levels and consist of multifaceted trophic pathways. Arctic ecosystems are made up of more than 2,300 types of marine algae, 7,100 endoparasites, and thousands of types of microorganisms. In particular, thousands of groups of microbes and protists (e.g., bacteria, archea and photo- and heterotrophic protists), hundreds of zooplankton taxa (mainly crustaceans), and thousands of uni- and multicellular benthic taxa (e.g., diatoms and seaweeds, foraminifera, sponges, turbellarians, cnidarians, polychaetes, molluscs and crustaceans) can be found in Arctic marine ecosystems. Also present in the Arctic Ocean are over 500 animal species. A total of 35 marine mammal species can be found there, with some of those species inhabiting the region all year round, for example, Narwhals, and Beluga and Bowhead whales. Of those 35 marine mammal species, 13 are endangered, vulnerable or near-threatened according to the International Union for Conservation of Nature (IUCN) Red List. Forty-five marine bird species breed specifically in the Arctic, along with 250 fish species, and 5,000 types of marine invertebrates which live in Arctic waters.

The Gakkel Ridge is a mid-ocean ridge located in the Arctic seabed and some scientists suspect that it is home to a very rich system of Arctic fauna. The ridge is currently not within any country’s established continental shelf; however, not all continental shelf claims in the Arctic have yet been established. Thus, it is possible that part of the Gakkel Ridge will remain permanently under international jurisdiction. Scientists have discovered a hole in the Ridge and suspect that a volcano is located inside it. In addition, research has located many hydrothermal vents in the Gakkel Ridge – at least nine to ten discrete vent sites. Hydrothermal vents are often an indication that an area hosts a particularly rich and special assortment of marine life. Hydrothermal circulation from such vents through young ocean crust supports diverse and unique biodiversity, which gives rise to the development of extreme ecological niches that are inhabited by unique chemosynthetic fauna (organisms whose primary source of energy derives from the chemical reactions of inorganic molecules). Current knowledge of the tectonic history of the Arctic Ocean floor suggests that there has been no interaction between the Arctic and the other major ocean basins during the Arctic floor’s history and, thus, it is likely that new species of vent biota, which have evolved in isolation from biota in other oceans, will be discovered at these hydrothermal locations on the Gakkel Ridge.

Some of the species found in the Arctic were forced to adapt during past periods of climate change. For instance, 16 million years ago, as a result of the glaciation during the Tertiary Period, Bowhead whales evolved from the Right whale. Six million years later, Beluga whales and Narwhals developed. However, the pace and magnitude of current climate change is much greater than that experienced by these species. According to the Arctic Council’s Arctic Marine Strategic Plan:

Arctic ecosystems are delicately balanced, having adapted to extreme living conditions. Some southerly species found in these systems are at or near their limits of distribution. The complex marine food chains depend on the highly productive Arctic phytoplankton and ice algae, which are especially adapted to cold water, darkness, and the unique freshwater/brine conditions of the sea ice/ocean interface.

This plan points out that Arctic marine species are currently under a lot of stress from warming waters, melting sea ice and biomagnified contaminants whose populations grow as they climb the food chain. For instance, global warming means that marine fish are currently moving north, as well as south, at a rate of 40 km per decade. Research suggests that if industrial activities continue as usual, more than 800 species of marine fish and invertebrates in the Arctic will shift towards the pole at a rate 65 percent faster than would be the case if the international community were to achieve the low-emission scenario that would limit global warming to 2°C, as suggested by the 2015 Paris Agreement. Indeed, the warming of the Barents Sea is already inducing such poleward displacement: Atlantic marine fish, such as cod, are shifting north while Arctic fish are being pushed into the corners of the Arctic Ocean. While Barents Sea cod are currently faring well, North Sea cod are not doing well in warming waters. Furthermore, it is unclear how long the favourable situation for Barents Sea cod will last. Marine predators, such as killer whales, are also moving north into Arctic waters, causing more predation of Arctic species, such as Narwhals, and Beluga and Bowhead whales.

Threats to Arctic Biodiversity

The Arctic Ocean is rich in marine biodiversity. But this biodiversity is threatened by climate change as the rise in temperature has been disproportionately high in the Arctic. In 2016, the Arctic had its warmest year since records started being kept in 1900. Temperature changes are amplified in the polar regions, a phenomenon known as polar amplification. This amplification is induced, amongst other factors, by poleward heat transport, which results in surface temperature anomalies and increased sea-ice melt in the Arctic. The United Nations Intergovernmental Panel on Climate Change (IPCC), in its Fourth Assessment Report (2007), explained that average Arctic temperatures have
accelerated at nearly twice the world average rate in the last hundred years. September 2017 witnessed the lowest Arctic sea-ice level on record, and the IPCC foresees an almost ice-free Arctic Ocean by September 2050. The Arctic is warming faster than any other region on the globe, even exceeding the pace of change in Antarctica where the amount of sea ice has remained relatively more stable. In addition, as global warming increases, so will interference from human activities, such as shipping, resource extraction, fishing, and cruise voyages. These activities introduce pollution and invasive species which threaten Arctic marine biodiversity.

Current Legal Protections for Marine Biodiversity in Arctic Areas Beyond National Jurisdiction

National Authority Outside of Territorial Seas

Most of the Arctic marine area lies within the exclusive economic zones (EEZs) or outer continental shelf areas claimed and controlled by the Arctic Five. These countries’ EEZs extend 200 nautical miles (nm) out from their respective coastlines. Coastal States’ sovereign rights also extend to their continental shelves (the natural prolongations of the landmasses beyond the waters of their EEZs). At times, the continental shelves can extend 350 nm from the country’s shoreline, if the State’s continental shelf claim complies with Article 76 of the UNCLOS.

Within their EEZs, the Arctic Five have exclusive economic and regulatory rights, although these are subject to the freedom of navigation by vessels of other countries. Thus, not only Arctic States, but every other State has access to the Arctic marine area.

In addition, coastal States in the Arctic may have extended rights by virtue of UNCLOS Article 234, which addresses ice-covered areas. Specifically, coastal States have the right to adopt stricter measures as they relate to the freedom of navigation in ice-covered portions of their EEZs.

Areas Beyond the Limits of National Authority

The water columns beyond the EEZs are known as the high seas, and the seabed beyond the extended continental shelves as “the Area” on a global basis, these marine areas outside EEZs and the Area cover 50 percent of the earth’s surface. In the Arctic, 2.8 million km² (1.1 million square miles) of marine area are outside of national jurisdiction. However, marine biodiversity within this area is largely unprotected due to a lack of regulatory mechanisms. Given that all States have access to Arctic waters (especially those that are not under national jurisdiction), interest in these areas is growing on the part of various global actors, such as the Asian States, and is leading to an increase in the risk of harmful impacts on marine biodiversity.

While the designation of MPAs provides one of the best tools for controlling human activity in marine areas, the legal aspects regarding how this tool could apply outside national jurisdiction is still unclear. MPAs are mostly found and enforced within national waters. Even if MPAs were declared in these areas by international agreement, countries that do not enter into that agreement would not be bound by the MPA designation.

Regional Seas

The declaration of MPAs in such areas has been attempted in various ways. For instance, the Parties to the Convention for the Protection of the Marine Environment of the North-East Atlantic (OSPAR) established numerous MPAs throughout its geographic area, although not in any of its Arctic waters. Although no MPAs currently exist within Arctic Ocean waters beyond national jurisdiction, OSPAR has plans to establish some.

UNCLOS

Articles 192 and 194 of the UNCLOS can be understood as supporting the creation of MPAs beyond national jurisdiction de facto, by prescribing the duty of States to protect and preserve the marine environment in those areas, including the protection of rare or fragile ecosystems and the habitats of depleted, threatened or endangered marine life. States’ protective obligations require them to adopt all necessary measures, which could certainly include designating MPAs, and to apply such protections beyond national jurisdiction.

Conservation Designations: The CBD and IMO

The Parties to the Convention on Biological Diversity (CBD) support the concept of MPAs, having adopted resolutions endorsing the notion of Ecologically and Biologically Significant Areas (EBSAs) – areas requiring special protection. Similarly, the International Maritime Organization (IMO) has developed a designation known as Particularly Sensitive Sea Areas (PSSAs). Both of these designations may apply to areas outside of national jurisdiction. Currently, however, there are few MPAs and EBSAs in the Arctic Ocean and they are all within national jurisdiction. There are no PSSAs in the Arctic Ocean.

EBSAs and PSSAs are only informal designations, however; they would need to be formally declared to be MPAs, in order to be enforceable. Thirteen EBSAs covering 22.7 percent of the Arctic marine area have been identified, but only one percent of EBSAs are protected by MPAs.

Designation by the Arctic Council

Under the Arctic Council’s framework of the Arctic Marine Shipping Assessment (AMSA), 98 separately designated areas, totalling 76 percent of the Arctic Ocean, have been designated as “Recommendation IIC areas” (AMSA IIC areas) – that is, areas of heightened ecological and cultural significance. Only five percent of AMSA IIC areas are within currently recognised MPAs.

The AMSA IIC criteria are similar to the IMO criteria for PSSAs and the CBD criteria for EBSAs. AMSA IIC areas are determined in the Arctic based on their “ecological importance to fish, birds and/or marine
mammals, i.e., being areas where large numbers of one or several species concentrate during particular times of the year, such as for breeding, feeding, staging or during migration”.

Collective View of Protections

Only 4.7 percent of the Arctic marine area is protected by MPAs, and this number fails to meet the Aichi Biodiversity Target 11 (adopted by the CBD Conference of Parties in 2010), which calls for protecting 10 percent of coastal and marine areas by 2020. Most of the MPAs that include any part of this 4.7 percent are what is known as “Category IV Habitat/Species Management MPAs”. There are no MPAs in Arctic marine areas beyond national jurisdiction although, as noted above, OSPAR has plans to establish some. Thus, there is a clear need for further regulatory tools to protect biodiversity in the Arctic Ocean.

There is, at present, a lack of clarity concerning the legality of the establishment of MPAs in areas beyond national jurisdiction, particularly with regard to the possibility that non-contracting Parties will not adhere to these arrangements. Consequently, the BBNJ Negotiations of formal legal terms appears to offer the best route for the recognition and establishment of MPAs to protect Arctic marine biodiversity in the Arctic ocean areas beyond national jurisdiction. Even if an agreement developed in these negotiations were to offer a universally applicable solution to protecting marine biodiversity, it might not alleviate the threats to Arctic marine biodiversity unless it concretely addresses specific features of Arctic marine ecosystems.

Inclusion of the Arctic in the BBNJ Negotiations

In its 2015 Resolution 69/292, the UN General Assembly (UNGA) decided to begin negotiations for the creation of “an international legally binding instrument under the United Nations Convention on the Law of the Sea on the conservation and sustainable use of marine biological diversity of areas beyond national jurisdiction”. It established the Preparatory Committee (“Prep Com”) to present recommendations on the elements of a draft text, emphasising four areas of work, with regard to marine resources and management in the high seas and the Area: 1) marine genetic resources, namely the sharing of benefits arising from their utilisation; 2) area-based management tools, which include MPAs; 3) environmental impact assessments; and 4) capacity building and the transfer of marine technology. The Prep Com met four times during the two-year period of 2016–2017, and presented its work to the UNGA at the end of 2017. At that time, the UNGA decided to convene a conference to elaborate the text of the proposed agreement. The conference will be organised in four sessions of 10 working days each. The first session took place from 4–17 September 2018. All sessions are expected to have been completed by the middle of 2020.

Options for the Inclusion of Arctic Marine Biodiversity in the BBNJ Negotiations

Arctic marine biodiversity can be regarded as the common heritage of mankind, warranting the attention of not only the Arctic States but of all the countries that have a stake in either the Area or the high seas of the Arctic. Compared to the negotiation of a Regional Seas Agreement, which would bind only its members, the inclusion of the Arctic in an agreement...
arising out of the BBNJ Negotiations could give universal protection to biodiversity in Arctic Ocean areas beyond national jurisdiction. In light of the increasing interest of non-Arctic States, especially China, in natural resources in the Arctic, it will be crucial to secure universally accepted protection for the biological resources of the high seas and Area in the Arctic – something that cannot be achieved solely through a regional instrument.

There are various options for including Arctic concerns in the BBNJ Negotiations. For example, the Parties could negotiate an Arctic chapter, which could include content on the uniqueness, vulnerability and complexity of Arctic marine biodiversity, along with mitigation measures for protecting Arctic marine biodiversity, namely, Arctic-wide MPAs in or including areas beyond national jurisdiction. This (separate chapter) option, however, is not likely to receive the support from delegates. It might also prompt non-Arctic States to raise concerns and questions about the uniqueness of other regional seas, which would make the negotiation process even more complicated. Beyond this however, the Arctic Council appears to prefer to avoid the involvement of the international community in Arctic affairs as much as possible.

The third option would be for the draft agreement to call for the establishment of regional ocean committees or regional scientific committees. One of these committees – an Arctic scientific committee or a regional committee – could be focused on the Arctic. This is seemingly the most viable option and was discussed by participants at Prep Com 3. The World Wide Fund for Nature (WWF) proposed the establishment of “regional integrated oceans management committees as subsidiary bodies, with delegated roles to coordinate action under regional and sectoral bodies with BBNJ-related mandates with the relevant actions taken under the biodiversity-related conventions”.§ IUCN then suggested “that a scientific committee should coordinate scientific input and advice from global and regional structures, ensuring transparency and independence”, a suggestion that was then formally offered by Japan and the Philippines.59

A Regional Seas Programme for the Arctic Ocean

There is, however, a fourth option, that should be considered in light of the potential for delay and uncertainty with regard to conclusion of the BBNJ Negotiations, adoption of a global agreement and its entry into force. Specifically, this option is to include a number of more general statements in the preamble or introduction of the draft agreement detailing the uniqueness and vulnerability of Arctic marine biodiversity and the need for States to take these factors into account when developing MPAs in the Arctic. Such a clause could formally recognise the current and future efforts undertaken by the Arctic States towards the possibility of establishing an Arctic Regional Seas Programme. This mention would give universal legitimacy to such efforts and their outputs. The following discussion focuses on the possibility of establishing such a programme for the primary purpose of protecting
marine biodiversity of the high seas and the Area within the Arctic Ocean. It assumes that an Arctic RSP, initially adopted by the Arctic States, would subsequently be recognised and respected by non-Arctic stakeholders.

**Urgency of Protecting Marine Biodiversity in the Arctic**

As discussed, Arctic marine ecosystems are fragile, complex, and unique. Arctic marine biodiversity is at an increasing risk of harm from rapid climate change, and current and near-future growth in anthropogenic activities, particularly fishing, shipping, and resource extraction, in the Arctic Ocean. Thus, urgent action is required to protect Arctic marine biodiversity, particularly that which is located outside of areas of national jurisdiction. The BBNJ Negotiations may take anywhere from two to ten years to be finalised and a further year or more to come into force. However, Arctic marine biodiversity requires protection now against a warming environment and greater human presence, and in a proactive manner. The recently concluded agreement amongst the nine States, including the Arctic coastal States, and the European Union on a moratorium on commercial fishing in the Central Arctic Ocean highlights the importance of protecting the 2.8 million km² of international marine area, along with its biodiversity, in the Arctic. Apparently, non-Arctic stakeholders, such as China, Japan, and South Korea, also recognise the need for more accurate scientific knowledge on the Central Arctic Ocean.

**Regional Seas Programmes**

RSPs are programmes established pursuant to regional agreements developed by States in order to protect marine biodiversity in a regional sea or seas which they border. For instance, the OSPAR RSP has as its main objective to “prevent and eliminate marine pollution and to achieve sustainable management of the maritime area, that is, the management of human activities in such a manner that the marine ecosystem will continue to sustain the legitimate uses of the sea and will continue to meet the needs of present and future generations”. Thus, RSPs are established in order to better manage human activities and ensure sustainable development of the marine environment in a given sea by integrating science-based knowledge for better management of marine ecosystems.

An Arctic RSP would have the authority to develop a network of Arctic MPAs applying to areas beyond national jurisdiction, although only the Members of that RSP would have agreed to submit to such authority and non-members would not be bound. Nevertheless, paragraph 3 of Resolution 69/292 forbids the BBNJ Negotiations from “undermin[ing] existing relevant legal instruments and frameworks and relevant global, regional and sectoral bodies”. Thus, the initiative lies with the Arctic States to develop an Arctic RSP. Should such an RSP be established, any agreement produced under the BBNJ Negotiations would have to be implemented in collaboration with it.

In addition, it is easiest to regulate an activity such as shipping, before it begins. Thus, it might be much more effective to develop an Arctic RSP now rather than waiting until human activities such as shipping and resource extraction have begun to impact negatively on the marine ecosystem and its biodiversity.

**Support for a Regional Seas Programme in the Arctic**

In order to establish an Arctic RSP, some considerations must be taken into account. Firstly, as noted, even if Arctic concerns were addressed in the BBNJ Negotiations, the Agreement would most likely not be enforced for many years to come. An RSP among the eight Arctic States (or the Arctic Five) could provide more timely and proactive protection for Arctic biodiversity in the near future.

Another question to be considered is this: Which Arctic States would be involved in negotiating the RSP? It is probable that the Arctic Five would choose to proceed on their own, being the only coastal States in the Arctic. However, it would be in the Arctic Five’s best interest to involve the other Arctic States for financial, scientific, and capacity reasons. If the Arctic Five opt for this latter approach, then the Arctic Council might be the best forum to hold such negotiations.

The Arctic States are best placed to formulate an agreement for the sustainable use of the Arctic marine environment, being well aware of the challenges facing Arctic ecosystems and what is required to safeguard them. These States also have had a history of effective cooperation on environmental protection and sustainable development of the Arctic region over the last twenty years, with the Arctic Council as their main venue, which would also be well-placed to provide scientific information relevant to the protection of the Arctic marine environment, should the Arctic States negotiate an RSP. The Arctic Council invests a large part of its funding in Arctic research, through a multitude of working groups and task forces which research and develop policies and recommendations for the most pressing and current issues in the Arctic. Two relevant examples of this work, for instance, are the Council’s Protection of the Arctic Marine Environment Working Group (PAME) and the Task Force on Arctic Marine Cooperation (TFAMC). Through these efforts, the Arctic Council has acquired unquestionably significant and crucial knowledge of the Arctic region and would constitute the most appropriate and effective starting point for discussions on Arctic marine biodiversity management.

The Arctic States, being the primary actors in the Arctic, prefer to be the ones making the decisions in this region. This is understandable given that, for example, the Arctic Five, as coastal States, are required to take action first in a situation of emergency, for instance, a major oil spill, and to finance the emergency response. As climate change accelerates, the situation in the Arctic will also call for more action and, consequently, financial resources from the eight Arctic States.
Development by the Arctic States

It is because of the Arctic States’ concern for the Arctic marine environment that the TFAMC was created in 2015. The need for a task force on marine cooperation was first advanced by the US, which stressed its importance. At that time, the US hoped that the TFAMC would recommend the establishment of an RSP. According to the TFAMC was mandated to:

- deliver a report to Ministers in 2017 identifying future needs for strengthened cooperation for Arctic Marine areas, as well as whether the Council should begin negotiations on a cooperation mechanism for Arctic marine areas—ideally naming the specific mechanism and/or any other recommendations it may deem appropriate.

Also in 2015, PAME produced its Arctic Marine Strategic Plan, which outlines the Arctic Ministers’ strategic vision for the Arctic marine environment and the four goals for 2015–2025. The TFAMC has used this plan’s vision and goals as a starting point for its deliberations. The vision is “healthy, productive, and resilient Arctic marine ecosystems that support human well-being and sustainable development for current and future generations” and includes four goals:

1. Improve knowledge of the Arctic marine environment, and continue to monitor and assess current and future impacts on Arctic marine ecosystems;
2. Conserve and protect ecosystem functions and marine biodiversity to enhance resilience and the provision of ecosystem services;
3. Promote safe and sustainable use of the marine environment, taking into account cumulative environmental impacts; and
4. Enhance the economic, social and cultural well-being of Arctic inhabitants, including Arctic indigenous peoples and strengthen their capacity to adapt to changes in the Arctic marine environment.

At the Senior Arctic Officials (SAOs) Plenary Meeting in March 2017, the TFAMC recommended that the Arctic Council:

- negotiate the terms of reference for a new subsidiary body and […] identify potential complementary enhancements to existing Arctic Council mechanisms. In negotiating these terms of reference, the Task Force should, inter alia, A. define the competence, function and responsibility of the new subsidiary body and how it will work with existing Arctic Council mechanisms (e.g. SAOs, Permanent Participants [PPs] and Working Groups); B. ensure that the new subsidiary body complements and enhances the marine stewardship work already taking place in the Arctic Council; C. allow for stepwise flexibility to phase in and add functions over time.

Two months later, the Arctic Council adopted this recommendation at its Fairbanks Ministerial meeting, and the TFAMC’s mandate was extended for a two-year term.

At the SAO Plenary Meeting earlier that year, the Arctic States noted that in negotiating the terms of reference for a cooperative mechanism, they were cognizant of the BBNJ Negotiations:

- The Task Force took note of global developments relating to marine stewardship. In particular, we have taken note of important developments within the United Nations, such as the adoption of the Sustainable Development Goals, including a separate goal on oceans, and the establishment of the Preparatory Committee to develop elements of a new agreement under the Law of the Sea Convention on the conservation and sustainable use of marine biodiversity in areas beyond national jurisdiction (BBNJ) before the end of the 72nd Session of the United Nations General Assembly. We are cognizant that the commitments our respective governments undertake in global fora, and regional marine cooperative mechanisms both near and far from the Arctic, represent the standards against which our marine cooperation outcomes will be measured.

The TFAMC is currently discussing options for the framework of a cooperative mechanism in the Arctic. An Arctic RSP could constitute an effective framework for marine cooperation in the Arctic Ocean. The TFAMC could consider modelling their RSP on OSPAR’s, given that OSPAR’s geographic scope extends part-way into the Arctic high seas and that OSPAR has been quite successful in tackling marine pollution. An Arctic RSP could also act as an umbrella bringing together all of the Arctic Council’s working groups, and better coordinating its marine biodiversity work. Such an RSP could establish an integrated, cooperative regional body which could undertake tasks of importance to the Arctic States via Programmatic Action Agendas including the establishment of a network of Arctic MPAs. As discussed above, the Arctic Council would provide an effective forum for negotiation of an Arctic RSP, by virtue of its experience in facilitating negotiations between the Arctic States. Indeed, in the past, the Council has been the venue for negotiating legally binding treaties, the most notable being the Agreement on Cooperation and Marine Oil Pollution Preparedness and Response and the Arctic Search and Rescue Agreement.

A legally mandatory RSP would not bind the non-Arctic States, if they are not parties to the instrument. Despite this, however, given their recognition of the importance of Arctic biodiversity, it is expected that other States would eventually cooperate with the Arctic States, respecting their stewardship role in protecting the marine biodiversity of the Central Arctic. Thereafter, once the BBNJ Negotiations are completed and the Agreement they negotiate enters into force, an Arctic RSP would receive further legitimacy which would legally bind actors both from within the Arctic and beyond.

Conclusion

Of particular concern in the Arctic is the marine biodiversity in its international waters and on the international seabed, which is without any clear legal
protection under international law. Unprecedented, unfolding changes in the Arctic associated with climate change and increased human activities will require the international community to adapt its legal regimes to protect marine species from the impacts of such changes. One of the most effective tools for protecting marine biodiversity is an MPA. This tool has been developed successfully in national waters and EEZs, but the legality of this tool in the high seas and the Area is contested. This article has presented two options. The first option is the provision, through the BBNJ Negotiations, of universal protection for Arctic biodiversity in those areas. This is preferable, as all States which accede to it would have to comply with the MPAs developed under the Agreement produced by the BBNJ Negotiations.

As an alternative, an Arctic RSP could be developed, either by all eight Arctic states or, at the very least, by the Arctic Five. An Arctic RSP would most likely provide the most tailored and fastest protection for Arctic biodiversity, but with the downside that any MPA developed under this RSP would be binding in areas beyond national jurisdiction only upon the members of the RSP. The best outcome would be the adoption of a hybrid approach which draws on the advantages of both legal options through the development of, first, an Arctic RSP and, later down the road, a provision in the Agreement developed in the BBNJ Negotiations, that would specifically provide for the protection of Arctic biodiversity in the high seas and the Area. Such an approach would provide the strongest legal protection for Arctic marine biodiversity by providing better adapted, more rapid and universal protection.

The authors wish to acknowledge the helpful discussions with Rachael Lorna Johnstone and the work of the WWF Arctic Programme in the preparation of this paper.

Notes


2 Payer, D.C., Josefson, A.B. and Fjeldså, J. 2013. “Species Diversity in the Arctic”. In: Meltofte, ibid., at 71.

3 Supra, note 1.

4 Ibid.

5 Supra, note 2.


8 Ibid.


10 Ibid., at 347.

11 Ibid., at 73 and 74.

12 Ibid., at 74.


14 Ibid., at 10.

15 Ibid., at 10.


24 Ibid.

25 Ibid.

26 Ibid.

27 Ibid.

28 Ibid.


34 Supra, note 31, at 46.

35 Ibid.


37 Ibid.


39 Ibid.

40 Ibid.

41 UNCS, Articles 192 and 194.

42 Ibid.

43 UNCS, Part XII (§§192–237).


45 Ibid.

46 See Annex II below.

47 Ibid.


49 Arctic Council and Protection of the Arctic Marine Environment (PAME). 2009. Arctic Marine Shipping Assessment 2009 Report. Arctic Council. Recommendation II C under the theme “Protecting Arctic People and the Environment” recommended: That the Arctic States should identify areas of heightened ecological and cultural significance in light of changing climate conditions and increasing multiple marine use and, where appropriate, should encourage implementation of measures to protect these areas from the impacts of Arctic marine shipping, in coordination with all stakeholders and consistent with international law. See also Figure 2 below.

46 Supra, note 24.
Involvement of Indigenous People in Environmental Impact Assessment

by Ferdinand S. Dhiksawan, Sudharto P. Hadi, Adji Samekto and D.P. Sasongko

Environmental regulations that addressed the involvement of indigenous people in the environmental impact assessment (EIA) process were enacted in 1969 in the US (Canter, 1996). In Indonesia, such regulations were adopted in 1982, and intensively implemented in 2000.

Indonesian regulation of the environment includes the EIA process as a means of preventing environmental damage. The EIA document is prepared by investors, following a regulatory process in which both the government and indigenous peoples are to be involved. In adopting the regulation, it was expected that engaging indigenous peoples in the EIA process would be a key component in achieving the objective of sustainable development.

In reality, however, despite the regulation, indigenous people have not been optimally involved in these processes. They have expressed the feeling that their involvement has only been formal and technical – investors doing only what is necessary to comply with governmentally mandated procedures.

As a result, conflict has often arisen between indigenous people, the government and investors in the territories in which natural resources are being exploited. Such conflict often occurs after an environmental feasibility licence has been issued, when the exploitation has started (Hadi, 2009). This research considered primarily the procedure for involving indigenous people in the EIA process, focusing on the need to involve them in all stages of the process, through to and including decision making. It has also noted two other key points:
• the status of government, investor and indigenous people in the EIA process; and
• the involvement of indigenous people in associated processes before and after the EIA process.

For this study, the authors undertook library research, consulting international journals, books and other published research results about indigenous participation in the EIA process for the period 1995–2013.

Indigenous People and the Utilisation of Natural Resources

For these purposes, there are three stakeholders in the utilisation of natural resources, each of which are supposed to have a significant impact on the environment:

• Indigenous people: they traditionally own the area in which they reside and as such are also the owner of its natural resources. Their cultural values, customary law and environmental wisdom, which have been preserved up to the present day, are key in maintaining a balance between people and the environment;
• The Government: it is recognised as the legal authority over natural resources (Subsection 33 in the 1945 Constitution); and
• Investors: they could be seen as the natural resource administrators.

Indigenous people are the first to be affected, economically and environmentally, by projects that impact natural resources. These impacts can be estimated through in-depth study – an EIA – which can prevent environmental damage. Therefore, the involvement of indigenous people should start very early, both before the assessed activities are considered, and during all parts of the EIA process, including announcement, submission of suggestion, opinion and response along with public consultation, EIA preparation and submission, decision making and announcement of environmental feasibility.

As originally set out by the government, in its role as a natural resources authority, the procedure for involving indigenous people in the EIA process is not considered to have lived up to its potential to represent all their concerns, as the owners of the natural resources. At present, some in government propose a reconstruction of the country’s EIA processes to address some recognised concerns, described herein.

Indigenous Involvement in the EIA Process Before the Reconstruction

As currently provided, the procedure for the involvement of indigenous people in the EIA process starts from the announcement of the business and/or activity plan, continuing through the public consultation, making and evaluation of the EIA, and includes in the EIA processes.

Roles of the Stakeholders in the Announcement, Socialisation and Consultation Phases

The involvement of indigenous people in the EIA process does stand by itself independently, but it can involve other stakeholders such as a mediator, initiator or government institution. Each such stakeholder has a unique role.

Role of the Indigenous Participants

The announcement, socialisation and public consultation phases of the EIA process give indigenous peoples the opportunity for both active and inactive involvement. While active involvement gives them the chance to directly convey information about their customary symbols based on values and norms existing in their life, inactive participation (written suggestions, opinions, and responses during socialisation and public consultation) is also intended to convey key information. The responses and suggestions presented are the product of a collective decision made by indigenous people in the customary meeting before the socialisation and public consultation take place. The deadline for submission of these suggestions, opinions and responses is determined by the indigenous people in agreement with the initiator.

Procedurally, indigenous people may express their suggestions, opinions or responses to the business and/or activity plan which is announced during a specified period of working days. The precise period is agreed, in each case by the three stakeholders, following the announcement of the plan, and that agreement is reported to the following regional authorities: the Governor/Regent/Mayor i.e., the Head of the Provincial, Regency or Municipal Environment Agency. That report is copied to the institutions in charge of the proposed business/activity (the institution whose announcement of the plan starts the EIA process) and the initiator.

Based on the research results, the involvement of indigenous people in the EIA process, whether “active” (direct presentation of views) or “inactive” (submission of written suggestions), is primarily focused on two elements of EIA activity, namely: (i) the process of announcement, socialisation and public consultation over the business and/or activity plan; and (ii) the formal preparation and evaluation of the EIA instrument, including making the decision regarding the environmental feasibility of the proposal. Figure 1 shows the procedure for the involvement of indigenous people in the process of EIA, as it existed, before any reconstruction.

Reconstructing the Indigenous Participation in EIA Processes

The following is a description of a reconstruction of the manner in which indigenous people should be included in the EIA processes.

For these purposes, there are three stakeholders in the utilisation of natural resources, each of which are supposed to have a significant impact on the environment:

• Indigenous people: they traditionally own the area in which they reside and as such are also the owner of its natural resources. Their cultural values, customary law and environmental wisdom, which have been preserved up to the present day, are key in maintaining a balance between people and the environment;
• The Government: it is recognised as the legal authority over natural resources (Subsection 33 in the 1945 Constitution); and
• Investors: they could be seen as the natural resource administrators.

Indigenous people are the first to be affected, economically and environmentally, by projects that impact natural resources. These impacts can be estimated through in-depth study – an EIA – which can prevent environmental damage. Therefore, the involvement of indigenous people should start very early, both before the assessed activities are considered, and during all parts of the EIA process, including announcement, submission of suggestion, opinion and response along with public consultation, EIA preparation and submission, decision making and announcement of environmental feasibility.

As originally set out by the government, in its role as a natural resources authority, the procedure for involving indigenous people in the EIA process is not considered to have lived up to its potential to represent all their concerns, as the owners of the natural resources. At present, some in government propose a reconstruction of the country’s EIA processes to address some recognised concerns, described herein.
Role of the Initiator

The “initiator” is the individual or a legal entity that is responsible for the business and/or activity plan that is the subject of the EIA. The initiator is required to announce the business and/or activity plan before starting to make the EIA document based on the provisions according to the culture of indigenous people. The announcement must be delivered in a local language. It should be presented in a customary house according to specifications given by the indigenous people involved.

The initiator is responsible for paying the costs of the announcement, of collecting suggestions, opinions and responses, and of transportation and accommodation for those affected people who are invited to join the drafting and discussion of the EIA document. He/she also pays the fees of the mediator for his participation in the announcement, EIA preparation and public consultation, as well as for his services as a researcher and resource person in the process of EIA evaluation.

Such payments are given in the consultation session with indigenous people who are in charge of drafting

Source: Government Regulation No. 27/2012.

Figure 1. Pre-reconstruction procedure for the involvement of indigenous people in the EIA process
The initiator is required to give answers to suggestions, opinions and responses from the indigenous peoples and to give them information about the EIA documents directly and/or through a mediator. During the preparation of the EIA, the initiator has to inform the indigenous peoples about its business plan, based on the schedule agreed with the institution responsible for the indigenous people. This announcement includes the following information: name, location, area of land, type and product produced, waste, and environmental impact.

Figure 2. The procedure for the involvement of indigenous people in the EIA process, after the suggested reconstruction.
Role of the Mediator

The mediator may be an individual expert, a group of people, a non-governmental organisation, a university or a government institution. The mediator’s role is to mediate between the people affected and the initiator/institution engaging in business based on mutual agreement. The mediator is needed during the announcement of the business plan, the public consultation and the EIA evaluation session.

In each EIA process, a mediator is chosen by the indigenous people and initiator to deliver the announcement for those who are from remote areas, have limited education or have limited knowledge of the plan or the EIA process. The announcement is given in a meeting and/or face-to-face interaction and delivered in a language or languages that all the people can understand.

Role of the Responsible Institution

The institution that is ultimately responsible for making the decision regarding the environmental feasibility of the plan will normally be an institution that operates at the regional government level, namely the governor, regent or mayor that is assigned to control the environmental impacts in that region. This institution is also required to announce the proposal of a business and/or activity plan for which an EIA must be undertaken. The government’s announcement must include the initiator’s name and address; the name and type of business and/or activity; the location of the proposed business and/or activity; an area map; the formal date of the announcement; the deadline for indigenous people to submit suggestions, opinions and responses; and the name and address of the institution responsible for receiving such suggestions, opinions and responses.

Technically, the institution in charge of environmental management is required to announce the business and/or activity plan through printed and electronic media – local or national. The announcement should be written in Indonesian, complete with the deadline for receiving suggestions, opinions and responses. The institution in charge of the environment is required to prepare a summary of the responses from the indigenous people for the commission evaluating the EIA, and to provide all the stakeholders with information about the evaluation and decision-making process. Moreover, the institution is expected to act as a facilitator, enabling the public to obtain whatever information is needed and available to enable them to participate in the EIA process.

Indigenous Participation in Evaluation and Decision Making

The involvement of indigenous people in the EIA and environmental licence processes, whether direct (active/ in-person) or indirect (through written submissions), should be through a process by which participation is possible at every stage of the EIA process including the making of the administrative decision on the environmental feasibility of the initiator’s planned business or activity. Indigenous people participate in the making of the EIA by being members of the Technical Team and the commission tasked with preparing the EIA, as well as serving as resource persons. Individual members of the indigenous community can participate in the assessment of EIA documents (prior to the final decision on environmental feasibility) by positioning themselves as members of the Evaluating Commission that is assigned to evaluate all the elements of the EIA document.

Appointments of indigenous people to the Commission are justified by recognition of the physical and socio-cultural impacts of the proposal on the indigenous community. The designated members are appointed pursuant to the customary law of the community. They are appointed in the customary house or customary court. The criteria for being allowed to represent the affected indigenous community on the EIA Evaluating Commission are as follows: being an individual who is acknowledged as having a customary communal land right or a tribal chief who has direct kinship with the affected communities. He/she may also be a spokesperson and/or a person who has a written mandate from the affected indigenous people agreed upon and appointed in the customary house or customary court. The acknowledgement can be manifested in formal evidence (such as, for example, a collective letter from the represented indigenous people), or other forms of acknowledgement determined and approved by those affected. Indigenous representatives who sit as members of the EIA Evaluating technical team or the EIA Commission Team should be capable of articulating the aspirations, suggestions, opinions and responses of the people they represent, including contradicting opinions; and have regular communications and consultations with the communities they represent.

Conclusions

Several conclusions have become apparent in the course of this research:

- Based on their status as owners of natural resources,
  - indigenous people will experience the economic and environmental impacts that result from the exploitation of natural resources by investors,
  - indigenous people have the right to obtain actual information from the government concerning the environmental impact of plans and activities proposed by investors,
  - indigenous people are required to be involved in the many phases of the EIA process.
- The Government, with its legal authority over natural resources,
  - has the right to control natural resources by implementing policies that promote the prosperity of indigenous peoples as the owner of natural resources;
  - is required to involve indigenous people as the owners of natural resources in the exploitation of the natural resource by investors.
- Investors, as the managers of natural resources,
  - are required to obey all of the regulations regarding the exploitation of natural resources stipulated by the government including EIA;
Investors who exploit natural resources have the right to obtain benefits equal to the benefits obtained by government and indigenous peoples. The EIA process must include all of these three groups of stakeholders if it is to be effective.

Acknowledgement
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Indonesia

Forest Register 45 Mesuji Lampung: Agrarian Conflict, Social Exclusion and Human Rights Violations

by Oki Hajiansyah Wahab, H.S. Tisnanta and Rahayu

The continuing agrarian conflict in the area generally known as "Forest Register 45 Mesuji Lampung" (herein, "Register 45") engenders many implications regarding the former economic orientation and agrarian policy of Indonesia. The establishment of various sectoral laws such as the Plantation and Forestry Laws has implications for the increasing variety of rules on the management of agrarian resources. During the era known as the "New Order", agrarian policy in the forestry sector gave rise to the exploitation of forest resources. Acquisition of land through the application of these rules was implemented according to the types of rights over land and natural resources that were involved. Among the types of rights that have been introduced since the New Order era are the following: Rights of Use, Forest Concessions, Industrial Timber Concession Rights and Mining Work Contracts (Nurjaya, 2005). This article raises two issues in the context of the conflict in Register 45 and how political exclusion and the consequent human rights violations have affected citizens in the area it encompasses.

Background

The Forests of Register 45

The economic crisis at the end of the 1990s was an important period in the history of forestry in Indonesia. The Center for International Forestry Research (CIFOR) shows that significant impact occurred with regard to the dynamics of the forestry sector from 1997–2003, which are the years immediately before and after the end of the New Order regime. It was a period during which the authority of the security apparatus and law enforcement agencies greatly declined, as a result of the spread of the political crisis from Jakarta to the regions. Political turmoil during that time also ignited the courage of those people who desperately needed farmland to survive to cultivate on plantation and forest land, etc. However, the era also saw the neglect of land particularly where rights holders did not have working capital to cultivate their lands (Sodiki, 2004).

In many forest areas including Lampung, conflict arose with regard to management access. One of the longest running forest management conflicts in Lampung involved the production forest area that has come to be known as "Register 45". Located in the Regency Mesuji, Register 45 encompasses an area that was originally 33,500 hectares, but has been expanded by later decisions, as noted below. Its boundaries were definitively measured and demarcated in 1985. By formal decree, the Minister of Forestry gave PT Sylva Inhutani Lampung (SIL) the right to manage an industrial forest area of 43,100 ha in the Register 45 area. Following the decree, SIL began commercially planting acacia trees in this area (Wahab, 2012).

Economic Crisis

The economic crisis at the end of the 1990s was important in the history of forestry in Indonesia. This occurred before and after the change of the New Order regime and led to a shake-up among companies in the forest sector, where much of the land in forest concession areas was neglected or abandoned. Many companies found it necessary to slow down their respective business activities. Conflict was triggered during this period due to the entry of farmers into the registered production forest areas.

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Republic of Indonesia. Government Regulation No. 27/2012 on Environmental Permits.
The authority of security forces and law enforcement agencies had fallen sharply. Political events in Jakarta coincided with burning and riots. Looting spread to the regions, as well. The political rhetoric of the time stated that this turmoil also emboldened the people to enter the lands dedicated to plantations, forestry and other activities. Undoubtedly, it made their lives difficult, and encouraged them to create their own work and livelihoods on lands that were considered abandoned, including lands within the forest area. This phenomenon also occurred in Lampung and the Register 45 area, where agrarian conflicts emerged with regard to natural resource management.

As the holder of the Industrial Forest Plantation Permit (HPHTI) on Register 45, SIL was also feeling the impact of the economic crisis and responded with virtual land abandonment, which gave birth to another Ministerial Decree revoking SIL’s HPHTI and also stipulating that the Register 45 forest area was 43,100 hectares. SIL was deemed unfit by virtue of its record on carrying out forest plantation development activities, both from a technical and financial standpoint, such as not fulfilling its financial and other obligations in accordance with applicable regulations. Among other things, since 1999, SIL has never submitted any Annual Work Plan or Five-Year Plan (Wahab, 2012).

In 1997, a group of farmers, also impacted by the economic crisis, began to enter into and cultivate the Register 45 area, one by one. Eventually, this incursion became rather massive. The farmers managed and developed the land, primarily by planting cassava and rubber, and keeping animals, for subsistence and also to amass enough money to eventually enable them to build residences and settlements. In general, these tenants still inhabit the area of Register 45.

The group of farmers working in these areas are mostly from three major ethnic groups: people of Java, people of Bali, and other tribes. Most of them came to the area from transmigration areas in the province of Lampung. These areas have come to be known as “self-help villages”, of which there are five, namely Moroseng, Morodadi, Morodewe, Suka Makmur and Asahan. Among other things, these communities have independently established various public facilities, as well as building roads to connect groups and hamlets and to transport crops.

**Forest Conflict**

In 2004, SIL again obtained a Ministerial decree granting them permission to operate their concession. The return of SIL’s licence had consequences for the Moro-Moro citizens that were resident in the Register 45 area. Conflict began in 2006, when these Moro-Moro citizens began to be challenged. Since then, repeated repressive actions involving security forces and various Pam Swakarsa units have occurred, in an attempt to expel Moro-Moro citizens from the area. Given that these efforts have not produced their intended results, the conflicts continue.

The people living in the Register 45 area have been branded by the government and media as “forest squatters” and “illegal” residents. As a result, in addition to suffering from the conflict, their constitutional rights as citizens have been neglected. For example, as discussed below, they have not been issued a National Identity Card (KTP) or other documents, have experienced a loss of political rights in each election, and have not been given adequate access to education and basic healthcare.

From its initial focus on access to the disputed forest areas, the conflict over Register 45 has spawned a variety of socio-juridical issues. Several different kinds of conflict have arisen and become relatively serious as they have developed in this very obscure area. Among these are a continuation of the various problems of determination of forest area, which in turn has led to agrarian conflict; as well as an ethnic and land-rights-oriented conflict.

A long-standing agrarian conflict in the Register 45 production forest was basically a manifestation of disputes over forest area access rights between local communities and the company holding the concession. Ultimately, this conflict developed to include not only the issue of access to forest area management, but also the lack of awareness of the citizens living in the area of their constitutional rights (Wahab, 2012). Specifically, when the District Government stigmatised living in the Register 45 production forest area as “illegal encroachment”, that characterisation had a direct impact on the recognition and fulfilment of the basic rights (to education, health, identity, politics, etc.) of citizens resident in that area.

The ethnic conflict referred to above involves a group of indigenous people – the citizens of Moro-Moro – who claim that the expansion of the forest area at Register 45 has resulted in a “taking” of their indigenous land. Activism, particularly by indigenous communities who feel their land has been stolen, ranges from lawsuits to the occupation of land. In this context, citizens of Moro-Moro experienced consequences that could be described as an attempt at total exclusion. Their social, political and economic status is entirely unrecognised by the State. The State also discriminates against them in political, economic, legal, social, cultural and other aspects of life. For example, at each general election, both at national and local levels, thousands of Moro-Moro citizens cannot use their voting rights because they are considered non-residents.

**Method and Materials**

This article uses a socio-legal approach – integrating legal drafting and other social sciences – in viewing and assessing the current situation. This approach enables the analyst to overcome some theoretical and methodological limitations of related disciplines – to develop a new form of analysis (Banakar and Travers, 2005). Primary data were obtained through in-depth interviews, while secondary data were also taken into consideration (through a review of documentation and library search studies).
Results and Discussion

Conflict in the Register 45 Forest

The tide of conflict in the Register 45 area has swelled over the last 10 years. It is a very basic kind of conflict. While it continues, many benefits and interests related to the protected forest as a resource are up for grabs. At issue, from the perspective of the commercial forest industry, are the flow and distribution of benefits from the forest production, as influenced by technology, capital, markets, knowledge, authority, social identity and social relations. The issuance of Ministry of Forest decrees that permit SIL to go forward with commercial forest exploitation has led to the commencement of efforts to evict forest residents, which devolved into a bloody conflict.

In 2011, SIL brought and won a lawsuit (herein referred to as the “Mesuji case”) regarding its rights in the area. Prior to that case, a task force (the Mesuji Fact Finding Team or TGPF) was convened and many concerns were examined.10 The TGPF’s report states that the conflict in Register 45 is a conflict over the management of industrial plantations that has long been a cross between disputes between investors, the public and the government. Changing and uncoordinated government policies, lack of government oversight, situations in which investors do not carry out their obligations or misuse of permits, aggression by people who are excluded from the area and the activities of land speculators were among the factors which it cited as contributing causes of the disputes in the Register 45 area. These challenges continue and have never been completely resolved. In fact, the 2011 decision of the Mesuji case seemed to be taken as a justification for the fact that none of those suggestions were implemented. Instead, the Mesuji case’s recommendations were considered to be the ultimate resolution of the Register 45 conflict.

One issue addressed in the TGPF recommendations arose from that team’s clear statement that the constitutional rights of the citizens in that area had been and were being violated. By characterising the status of forest residents as “illegal”11 and “an encroachment”, the government was creating a situation which had the effect of not recognising the residents’ constitutional rights. That stigma seemed to provide a justification for the fact that none of those suggestions were implemented. Instead, the Mesuji case’s recommendations were considered to be the ultimate resolution of the Register 45 conflict.

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The combination of the fact that they live in an area of agrarian conflict and the “illegal” stigma attached to them has increased their social vulnerability. Constitutional rights including not only access to education, but other access (e.g., healthcare) have also been affected. The local government strongly argued that, under Law 23 of 2006 on Population Administration, those living in the Register 45 communities could not be categorised as “residents” because they live in forest areas, even though they had been a village-like community entity for a decade.

Cut off for a decade from the services, social networking, and growth opportunities that are enjoyed by most people in general, these residents are harmed by the “illegal” stigma, which has emerged as part of a State practice of presenting the principles of legality and then putting them in opposition to the narrative of “illegality” – in other words the practice of reducing a particular group’s actions into what is characterised as a general (illegal) condition and thereby distinguishing it from the State’s categorisation of others’ behaviour as acceptable and/or undertaken on behalf of the State (McCarthy, 2011).

Basically, the interests of governments, the private sector and the public benefit are in a “contest” – that is, a dynamic process of interaction and negotiation – in the context of the struggle for natural resources. These three actors, however, are in this contest mode in all conflict over agrarian issues or natural resources in Indonesia. In Register 45, the contested control over forests has long been a subject of such cross-cutting disputes. In that socio-political climate, government policies, although changing, are often uncoordinated and involve minimal government oversight at best over investors and land speculators who do not perform their duties, demonstrate incompetence and abuse their permit rights. People whose lives and families are severely negatively affected can become aggressive against those who have abused them. In this way, the weight of disputes in Register 45 has become cumulative and “solutions” have never completely resolved the problem.

Ignorance, Social Exclusion and Human-rights Violations

The economic crisis that hit Indonesia in the late 1990s became a turning point in forestry conditions. The economic meltdown opened opportunities for people affected by the crisis, who were able to manage many forest areas that had been neglected by commercial users due to their own situations leading up to and following the economic crisis. This was the heart of the Register 45 conflict.

Recognition of Residential Rights

Having come to Register 45 at the end of 1996, the Moro-Moro people have a 22-year basis for their claim of the right to be recognised as citizens of Indonesia. They have not, however, received identity cards, which seems to have been part of an overall intention to avoid recognising their legal and constitutional rights. Such an abandonment could be considered to be an act of discrimination.

Under the law,12 people of Indonesia and foreigners who have a fixed residence permit must be issued a KTP if they are at least 17 years of age or have ever been married. The civil/political right to a KTP impacts on
each person’s right to ensure that their other rights – economic, social, and cultural – are respected, fulfilled and protected. People who do not have KTPs find it difficult or impossible to get driving licences, health insurance and access to various other government assistance programmes.

Rights of Children

The government’s de facto waiver of constitutional rights in the Register 45 territory has, in effect, placed serious pressures on the communities, even on children born in the area during the course of this conflict. This fact raises another constitutional challenge, given that Article 28B paragraph 2 of Indonesia’s Constitution states that every child has the right to survive, grow and develop, and to be protected from violence and discrimination. As to the latter, the Government has discriminated against the Moro-Moro children by deliberately ignoring their separate constitutional rights and legal rights. While it is clear that no child would choose to be born in the territory that is riven by strife, the Moro-Moro children are there, nonetheless. The State should recognise, fulfil and protect their rights as children of the nation.

Social Exclusion

As noted by Hall et al., the conflict in Register 45 has engendered a “politics of ignorance”, effecting social exclusion through power, regulation, pressure and legitimacy (Hall et al., 2011). Social exclusion itself is both a process and a result. It is a process when institutional obstacles interfere with people’s ability to achieve life’s necessities, human development and equal rights as citizens. It is a result when individuals or groups are not able to fully participate in societies because of social identities such as ethnicity, gender, caste or religion and locations like inland areas war zones or conflict areas.

Peluso and Lund (2011) provide an initial picture of the development of new forms of restrictions on control and control of land. This article’s argument is based on the results of their study, emphasising the active creation of new forms of control over land through the struggle between various actors, contexts and dynamics.

The denial of the citizens’ legal and social rights is an indicator of social exclusion. The process of stigmatisation, oppression and restriction through policy and other institutional discrimination operates to exclude individuals or groups from social, political, and cultural life (Somerville, 1998; Pierson, 2002).

Discrimination

Discrimination against those involved in the Register 45 conflicts is basically motivated by a combination of the current claims, historical background and strategies developed. The contrast is striking – law enforcement actions are taken against those residents who allegedly entered the forest area illegally, while efforts are not taken to enforce the law against HPHTI violations committed by SIL. Discrimination is also related to a network of power – ultimately expressed in the choice of social action taken in the context of controlling interests and maintaining access. The process of community exclusion on the outskirts of the forest area is actually related to the problem of unequal power relations between the company, the government and the rural peasant communities – relationships that are directly related to the use of space in the forest area (Wahab, 2017).

Economic Exclusion

The loss of rights and social exclusion described above are interconnected to other more direct problems: economic exclusion. The initial steps to remove people from the land involve a process that limits their rights (such as the rights to public utilities, education, health, clean water, road access, etc.). Those excluded persons may find it difficult to support themselves, and to access the social, economic, political and educational networks that might help them. Exclusion automatically breaks down such networks and the connection they provide to opportunities for the development of individuals and their livelihoods.

Protection of Human Rights

The experience of various conflicts over the management of agrarian resources in Indonesia often has implications for the neglect of citizens’ rights. The agrarian conflict that occurred in Register 45, for example, was not only a dimension of violence, but also resulted in the neglect of the constitutional rights of other citizens. The neglect of constitutional rights in turn also has implications for the recognition of rights regulated in law or legal right.

Indonesia’s Constitution formally includes human rights protection, which should apply in this situation. The government should guarantee law as an instrument for realising social justice. To this end, the law must be able to regulate security and to protect, respect, and fulfil citizens’ rights without any discrimination.

Article 27 of the Indonesian Constitution states “All citizens shall be equal before the law and the government and must uphold the law and government with no exception”. Article 28 also mandates that “[e]veryone has the right of recognition, guarantees, protection and legal certainty, and of equal treatment before the law”. Similarly, the country’s Law on Human Rights specifically states that discrimination on the basis of religion, ethnicity, race, social status, economic status, gender, language, or political beliefs is not allowed.

All of the rights discussed in this section are strongly entrenched in Indonesian law. The responsibility of the State to respect, protect and fulfil human rights was made clear in the Indonesian Constitution as was the principle of their democratic enforcement and protection. In addition to these constitutional rights, other legal rights arise under the Guarantee Act and its subordinate legislation. Given that the provisions on human rights have been adopted in full in the Constitution, these provisions too can be considered as “constitutional
rights”. In addition, every citizen of Indonesia has legal rights that are more detailed, and is entitled to engage in operational activities which are regulated by law or other legislation that subordinate to these primary documents. Such rights are generally classified as “legal rights.”

In practice, power tends to be manipulative and its exercise may often silence criticism or claims, prevent the actualisation of human rights protection and tarnish the sovereignty of the people. The only reasonable response to these conditions is to base the resolution of all such situations in a critical consciousness of constitutionalism (the sine qua non of the existence of a State that recognises the rule of law) and the protection of human rights from undue infringement by the power of the State.

Conclusion: The “Politics of Ignorance”

The conflicts in the Register 45 production forest are essentially a manifestation of the critical clash between the needs of forest enterprises and those of forest communities. As a result of the rising tide of such conflict, the Moro-Moro have been illegally stigmatised as encroachers by the government – a stigma which has caused them to suffer negative impacts on and losses of basic rights that are regulated and protected by the Indonesian Constitution and other various laws and regulations.

The conflict in Register 45 has spawned a level of political negligence and social exclusion that is sometimes referred to as the “politics of ignorance”. The experience of the citizens of Moro-Moro is essentially abandonment – a social exclusion process through rule, regulation, pressure and legitimacy. In essence, these politics of ignorance, as practised by the Mesuji Regency government, constitute a series of efforts to impose such social exclusion processes. One need only look to the loss of citizens’ rights to, inter alia, education and health to see that the Mesuji Regency Government has indeed violated the social, economic and cultural rights of the citizens.

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References


Notes

1 The New Order is the common way to refer to the period from 1966–1998, during which Suharto was president of Indonesia.

2 Minister of Forestry Decree number 93/Kpts-II/1997.

3 SIL is a joint venture between PT Silva Lampung Abadi and PT Inhutani V. SIL was established based on notarial deed No. 360 dated 27 October 1992.

4 Generally known as the “Hak Penguasaan Hutan Tanaman Industri” or HPHTI.

5 Minister of Forestry Decree Number 9983/Kpts-II/2002, concerning revocation of Forestry Minister’s Decree Number 93/Kpts-II/1997.

6 Minister of Forestry Decree Number 322/Minhut-II/2004 concerning revocation of Decree Number 9983/Kpts-II/2002 and re-enactment of Decree Number 93/Kpts-II/1997.

7 Civilian volunteer security force created by the government. Ed.

8 The card is formally known as the Kartu Tanda Penduduk, and generally called the KTP.

9 Apparently, formal case names and citations and case summaries are not always available in Indonesia. The author offers the following links for further information on the “Mesuji case”: http://id.beritasatu.com/home/peneyleasan-kasus-meniji-libatkan-semasa-unsur/26401; https://books.google.co.id/books?id=1BMaDQIAQBAJ&ots=UvorUPGhaf&sig=93sHwNmCy0zq8-Ymk0unJv7Xug&hl=id&sa=1BMaDQAAQBAJ&pg=PA8&lpg=PA8&dq=Register+45+Mesuji+Case&sourc=bl&ei=Vt0aYs5R88pQAgT02oK76Q; http://id.bergulat.com/home/peneyleasan-kasus-meniji-libatkan-semasa-unsur/26401; http://www.researchgate.net/publication/321164906_The_Causes_of_Protracted_Land_Conflict_in_Indonesias_Democracy_The_Case_of_Land_Conflict_in_Register_45_Mesuji_Lampung_Province_Indonesia. Ed.

10 The TGPF was formed by the Coordinating Minister for Political, Legal and Security Affairs through KEP.64/MENKO POLHUKAM/12/2011 after the Register 45 conflict became a national issue.

11 The TGPF was formed by the Coordinating Minister for Political, Legal and Security Affairs through KEP.64/MENKO POLHUKAM/12/2011 after the Register 45 conflict became a national issue.

12 Article 63, para. 1 of Law No. 1999, on Forestry.

13 Reports on the Mesuji case clearly indicate that various offences of this type have been committed.

14 Constitution of Indonesia, Article 27, para. 1.

15 Ibid., Article 28D, para. 1.

16 Law No. 39/1999, Article 1, para. 3.

17 Article 28, para. 5.
A number of mining-policy-related conflicts have occurred in Central Java Province, in the districts of Rembang, Kebumen and Pati, among others, related to the construction of a cement plant in Rembang. The conflict emerged at an early stage, as soon as the details of the construction were presented to the local communities. Residents brought suit successfully, and have continued to win all appeals, even to the last court. But the development has not stopped (Kuwado, 2017).

Background

The basis of the conflict is the location of the plant and of the mineral exploitation needed to provide raw materials for its operation. The factory and the exploitation are in a karst area in the Watuputih groundwater basin (Wu, 2014) – an area of around 500 hectares (ha) (Andrianto, 2013). The karst itself is used for human needs and its commercial utilisation causes water quality degradation, negatively impacting the citizens’ right to water resources (Arrsa, 2015).

Karst is a topography formed from the dissolution of soluble rocks such as limestone, dolomite and gypsum. In the area, there are 49 caves and underground rivers, as well as 109 natural springs (Wu, Kuwado). Human activities and consequent natural changes tend to decrease water quality, especially in karst areas, which are susceptible to water pollution (Rahayu et al., 2016).

The citizens’ lawsuits related to threats to groundwater, as a source of their livelihood. They revolved around turmoil in the community in Kebumen, especially regarding the karst hill in South Gombong, as well as beside Rembang. Although the government requires the plant to use environmentally friendly technology, the community has claimed that the karst mining of cement raw materials is damaging the environment and disrupting the availability of clean water in Southern Java.

Conflict also occurred in Pati, an area that is home to communities of local people known as Sedulur Sikep, who hold a different, non-“technocratic” view of the environment (Rofuiddin, 2016). In this case, the conflict focused on the cement plant’s exploitation of resources within the karst area of the North Kendeng mountains.

Further opposition was voiced by women, objecting to the deterioration of the quality of the environment, which would have implications for their lives (Lestariningisih and Wariyatun, 2015; Asriani, 2016).

Legal/Policy Background

Looking at a number of cases, it appears that local wisdom has not been regarded as important in development policy. It also seems that the law in this regard is not powerful and the legally required procedure does not even seem open to receiving feedback (Rahardjo, 2009).

Two views have arisen in addressing these legal situations. The first arises from an anthropocentric conception of environmental law, policy and ethics. Perceiving man as the centre of the universe, this approach views each natural resource as something to be exploited, thereby denying the conditions of harmony and balance of people and the environment, ultimately causing damage to environmental functions. Nature is an object to be studied, analysed, manipulated, engineered and exploited (Keraf, 2010). This approach favours industrialisation and has numerous negative implications, particularly the difficulty of citizens accessing land and its resources (Kurniawan, 2014).

The second sees nature as the object of the rule of law – legitimately treated only as the fulfilment of human needs. Here, the quality and quantity of a natural resource must be seen in a context that changes depending on how it is used or treated. Human behaviour largely determines the allocation of natural resources (Mitchell et al., 2007).

The above perspective has implications for the ecological crisis. Keraf offers an alternative – a holistic view of the environment and the ways to fix the ecological crisis; not seeing the world as mechanistic, but instead characterised by organic, dynamic and complex relationships, as a unified system of living organisms, ecosystems and social systems. As a whole they are related to each other and cannot be reduced to separate and individual elements (Keraf).

This outlook is not apparent in environmental policies, such as the mining policy at Pati. In order to rectify this situation, policies, and their implementation, should integrate the values of local wisdom into development, so that the government does not view the economy as the only objective to be considered in decisions about the utilisation of natural resources. In particular, the input of the Sedulur Sikep people with regard to the karst area in the mountains of Kendeng is essential, to ensure that the government does not marginalise ecological and socio-cultural relations in its territory.

In Article 18B(2), the 1945 Constitution of the State of the Republic of Indonesia addresses this issue:

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The State recognizes and respects the unity of indigenous and tribal peoples as long as they are alive and in accordance with the development of society and the principle of the Unitary State of the Republic of Indonesia.

Clearly, the implementation of this provision necessitates the development of policies that are sensitive to the value of local wisdom.

Another relevant constitutional provision is found in Article 32(1), which affirms:

The State advances the national culture of Indonesia in the midst of world civilization by guaranteeing the freedom of society in maintaining and developing its cultural values.

The recognition/respect of indigenous peoples cannot be separated from the advancement of national culture. In one respect, the State promotes the national culture in the midst of world civilisation by guaranteeing the freedom of society to maintain and develop its cultural values. It should be possible to support and implement the guarantee of maintaining the identity of the community, by giving its members the freedom and supporting their need to maintain and develop cultural values and ethnic traditions (Marpaung, 2013).

As outlined by the above explanation, it is absolutely clear that local wisdom in society should not be abandoned in service to development. Decisions about development issues should not be partial in focus or made from the top. Such decision making must be bottom-up in order that development can harmonise economic, ecological and socio-cultural interests.

Research Objective and Method

This article starts from the reality of local community wisdom in Pati. It addresses two questions, namely: (1) Why is the regional policy related to the construction of a cement factory still not accommodating local wisdom? (2) How can the value of local wisdom be recognised and given a proper role in the Pati Regency’s regional development plan?

This research examines the law more from its overall context than from the mere text alone. While the law as text manifests itself in the form of laws and regulations, its overall context cannot be separated from considerations related to the economy, politics and socio-cultural issues.

In light of its contextual focus, this research should be viewed as “socio-legal” (Banakar and Travers, 2005). As such, it illustrates the fact that the law cannot solve this problem in a mono-disciplinary manner; it works inter-disciplinarily. In addition to documented data, this study also uses the main data obtained through in-depth interviews. The data are then analysed qualitatively.

Discussion

Regional Policy related to Cement Plant Construction Not Accommodating Local Wisdom

This research focuses on the importance of local wisdom and values. For example, among the locations used for cement plant construction, especially the Kendeng Mountains in the northern part of Java, local communities consider the mountains themselves to be noble. They value this natural nobility very highly and, on that basis, treat the area in a very respectful manner.

The humble behaviour of the community toward nature requires that their activities should not cause or impact any decline in the quality of their environment. To these communities, exploitation that could potentially damage the mountainous environment and water sources is regarded as a direct and potentially destructive affront to the values and local wisdom that are the bases of their lives. As Koentjaraningrat points out, these values have a very important role in human life (in Warassih, 2014). From childhood, each society’s cultural values are inculcated in every individual within that society. Those conceptions have long been rooted in their souls. It is difficult to replace a community’s cultural values in a short time.

Recognition of local wisdom aligns with Capra’s perspective (discussed infra) regarding the importance of a holistic and systematic ecology-related perspective in building a sustainable human community. Ecological processes are cyclical rather than linear. There are a number of important principles, such as interdependence, cooperation and partnership. All parts make up one whole, and these parts are dependent on and related to each other in a network of life (Akbir, 2014).

For the above reasons, governments should not abandon, or cease to recognise the value of, the local wisdom of society. Rather, it should be reflected in how they treat their environment (Kusumasari and Alam, 2012).

The value of local wisdom should be seen as something real (Setiadi et al., 2017). It limits the community’s activity within the environment. The communities discussed in this article are special examples. In particular, for communities in the Kendeng area (Pati Regency), local wisdom is closely related to the lives of the Sedulur Sikep communities that live and depend on the ecological components of the area (Mojo et al., 2015).

The local values of the Sedulur Sikep extend to all aspects of their life. In the past, their society was known to want to free itself from the bonds and control of the Dutch (Nawiyanto and Endrayadi, 2017). Their values are apparent in their name, which literally means “brother or man with good character and honest”. Some of their primary tenets include “no lying”, “no stealing”, “do not be jealous” and “do not quarrel” (Mumfangati, 2004).

According to its history, Sedulur Sikep society has embraced the principle of preserving nature for hundreds of years. They regard the earth as a mother who must be protected as a life giver, and believe that Mother Earth must be maintained to be sustainable (Erdianto, 2017). The philosophy held by the Samin community is “Mother earth has given, mother earth is hurt, mother earth will judge” (Dhewy, 2016).

The local wisdom of the Sedulur Sikep is also related to conservation (Mojo et al., 2017). In the wider context...
related to policy, environmental issues in relation to local wisdom are of supreme importance (Hadi, 2017). In this regard, Sedulur Sikep society has a culture of resistance. They believe that a form of resistance against an oppressive authority can be done without violence. For the Javanese who still follow the behaviour and manner of the Javanese, anger has various levels (Erdianto). The level of anger is extreme, as evidenced by levels of violence within their communities. They do not hurt others or behave violently against them (Permanasari, 2009).

The origin of the Sedulur Sikep society is tied to the son of Raden Surowidjojo named Samin Surontiko (1859–1914). Indeed, another common name for the Sedulur Sikep is the “Samin” people. Surowidjojo had been a kind of Robin Hood, who stole from the Dutch elite, then distributed what he got to the poor. Later, he founded a group called “Tiyang Sami Amin”, which resulted in a movement that was continued by his son.

The Samin movement began in the 1890s, as a response to the excessive imposition of control by the Dutch colonial government. By 1900, Samin teachings were spreading rapidly, from the Blera region to Bojonegoro, Grobogan, Ngawi, Pati, Rembang and Madiun. In 1907, it was reported that Samin followers numbered 3,000. Samin himself was later arrested in Rembang by the colonial government, expelled from Java, and eventually died in Padang, West Sumatra, in 1914. Although they peaked in 1914, the activities of the Samin followers did not cease (Erdianto; Permanasari).

Based on the Samin teachings, the Sedulur Sikep society focuses on protest, as well as defending the lives of farmers. The Samin people are aware that mining activities in karst areas have a devastating impact on the water sources under the Kendeng Mountains, and that all peasants in that area depend on the existence of a reliable water source from the mountains. So, for the Samin, opposition to the cement operation is a struggle to defend the homeland (that is, to preserve the land and water) for the sake of their very lives. Their struggle is an attempt to reclaim the authority of self (and community), with all its definitions. Sedulur Sikep society is not dazzled by the lure of “prosperity and more prosperity”, as envisioned by the financiers.

Sedulur Sikep society assumes that wealth and prosperity mean something different from material values, such as rank, degree, money and power. They value their lives as sane and self-sufficient farmers. Production factors that support agriculture, especially water, land and humans, must be maintained and cared for (Permanasari). This is contrary to the attitude of the promoters of the cement plant. The community’s actions are based on a principle that the Sedulur Sikep does not demonstrate to show opposition in the face of problems, because public demonstration is overbearing (Roziki, 2017).

The government should be able to understand the local wisdom of Sedulur Sikep society. Their views should not be bartered on the bases of the amount of revenue calculated by those who advocate the “prosperity and more prosperity” approach. It is no simple matter, however, to deny the implications of the latter position, even with the legal support of Constitution Article 18B(2), as quoted above.

What is required of the Regional Government in a situation like this is a careful balancing process. The plan to build a cement factory is linked to efforts to improve general welfare by improving the economy. As such, any decision to permit it should be balanced in a manner that will also take the project’s impact on the community into account. It should not be allowed to impact the community in an expensive way or its overall effect will ultimately be as a net cost to the regional income – a loss due to exploitation of its natural resources.

In policy terms, this means that local policy should be integrative – addressing the various conditions of society, and acknowledging the specific geographical characteristics associated with karst formations in the region. It must give proper attention to the condition of the traditional people who live together with nature, seeking to ensure that any development that it allows will benefit all parties, including the traditional community (Mojo et al., 2013; Parnaweni, 2014). Karst areas need protection and conservation (Wacana et al., 2014) but, at present, each region has a different approach to karst areas. Although some studies identify the characteristics demonstrating why karst needs to be protected, often, when developers show an interest in a site, the necessary protection is not implemented.

Details of the Pati Proposal

Regarding the cement factory in Pati, the local authorities awarded permission for the development to PT Sahabat Mulia Sakti (PT SMS). The Pati District government had issued a number of relevant local policies for the issuance of permits, specifically, regarding the issuance of location permits, “exploration IUPs” (Izin Usaha Pertambangan or mining business licences) and environmental permits. For this project, the location permit was issued by Decision No. 591/608/2014 (“concerning the Extension of Permit of Location for a Cement Factory Establishment of PT Sahabat Mulia Sakti (PT SMS)” by the Head of the Integrated Licensing Service Office of Pati Regency. Under this decree, the government of the Pati Regency formally permitted the establishment of PT SMS’s cement factory in the Tambakromo Sub-district, stating that it considered this proposal to be in accordance with the Spatial Plan of the Pati Regency. The locations selected are in Tambakromo Village, Mojomulyo, Karangawen and Larangan. The total land area is 180 ha, with 143.22 ha of plant site and buffer zone, 20.14 ha of road and 16.64 ha of office and dormitory.

On the basis of that permit, the Head of Integrated Service Office of Pati Regency subsequently issued Decree No. 545/001/2014 concerning the Extension of Mining Business License (IUP) for Non-Metal Mineral Exploration (Clay). By this decree, the Pati Regency government granted a three-year IUP to PT SMS with the terms of the Licence covering an area of 663 ha in the villages of Larangan, Maitan, Pakis and Wukirsari.
Then, the Head of Integrated Service Office of Pati Regency issued Decree No. 545/002/2014 concerning Extension of Mining Business License of Non-Metallic Mineral Minerals (Limestone). This decree, too, allows three years of resource exploitation by PT SMS; this time covering a total area of 2,025 ha in the Kayen and Tambakromo Districts. On 8 December 2014, the Regent of Pati issued Decree No. 660.1/4767 (“on Environmental Permit for Cement Plant Construction and Batagampung and Batulempung Mining in Pati Regency by PT Sahabat Mulia Sakti”).

The licensing process by which these permissions were issued did not accommodate local values and wisdom. This is a serious omission, especially considering that it relates to an area and resources that are the source of water for local communities. As noted above, local wisdom and local people’s aspirations are or should be very important aspects of any government policy. The government’s deliberations over a permit should have considered the plant construction plan not only from the perspective of investment and economic benefits, but also taking the public’s needs into consideration. To do this, it should have explained to the public the potential impact from the development.

Additional factors that are important in environmental decision making are the geographical, ecological, and social and cultural aspects of the decision. Decision makers should recognise, for example, that people are dependent on nature in other ways as well – that it allows them to interact with each other. Culturally, each application must be seen in terms of how it fits with the ways in which society integrates with nature and its inner resources in the lives of the people.

Field data indicate that the community never received the various kinds of information mandated; descriptions of condition and implication. The government focused only on the economic benefits and marginalised the ecological, and even the social and cultural implications. It did not give special attention to other factors relating to the karst area in Pati, which is important, for the community, not only in economic terms, but also as an ecological, social and cultural element of their lives. This spawned a heated debate that ultimately led to conflicts between communities and mining investors and local government, while also enabling potential environmental damage that may have both short-term and long-term impacts on the communities concerned.

The above-mentioned conflicts will only widen, if government and applicants rely on or publicise incorrect information, or otherwise politicise the situation. The human rights of local people who oppose the mining should be recognised. If a decision to license the facility and mining is made, reasons should be given that specifically address the estimated impact on them. This would make it clear that the estimated impact is not a mere invention, but is supported by a number of studies (as noted) and that the government has paid attention to these matters.

In choosing to consider only the potential of natural resources as capital for income generation, the government seeks to utilise, or invites investors to utilise, the region’s natural resources as a source of current income for the region. Such thinking sees the situation in black and white (in conformance with certain legislation only), whereas the true situation holds many shades of grey. Law must not only integrate closely related sectors, but also balance very different values. This is the sphere of policy. Without this balance, the financial profits derived from the natural resources sector are accounted for by serious losses to the community including, as noted above, the loss of the potential of the karst area to store the local people’s water source and thereby their livelihoods (they are primarily agricultural communities) – a very understandable reason for local communities to oppose and reject the cement mining plant.

The Regional government needs to take pains to understand the nature of the collision between the interests of firms and investors who decide on the basis of profit-loss calculations and those of the communities dependent on the affected resources, before it grants any permit related to the existence and utilisation of natural resources in the region.

Empowerment of Local Wisdom Values in Local Policy

The proper recognition of local wisdom is not only strategic and ecological, but also socio-cultural. In the context of law, the empowerment of local people who rely on this wisdom cannot be ignored. The legal concept that enables such empowerment not only regards law as a norm, but includes symbols of how their views and behaviours maintain the surrounding world.

Generally, the values of life in society must be seen as a complete unity with the people who surround it. This value should be seen as wealth. It validates the nature of society and community life. Through these values, local peoples have developed their own way of maintaining and connecting with the existing natural resources. The integrity of natural resources in the form of good environmental function will also affirm the existence of community and society itself (Rahayu, 2016).

According to Sukirno, there must be policy alignments towards such values (Sukirno, 2015). A clear and firm legal basis is needed, because the law is clear and clearly has implications for the quality of the environment. As regards natural resources, the implementation of the law is not as clear-cut as one might imagine (Thontowi, 2015). Even where such a legal basis exists, there have been a number of Constitutional Court rulings indicating that it has not guaranteed proper protection of these values (Mandasari, 2014). In the broader context, this may inhibit the legal expansion of such concepts in Indonesia, particularly those related to indigenous peoples (Sulaiman, 2015).

Unfortunately, it is not easy to legislatively empower the role of local wisdom. It requires, firstly, an understanding of the local wisdom itself, in order to determine how the environment and nature are viewed holistically. Those who do not understand local wisdom are unable to appreciate the patterns of a society which...
values maintaining the quality and quantity of the environment. Secondly, in many regions the political will determines the extent to which recognition of local wisdom is to be realised. Finally, the form in which such political will is manifested also makes a difference. If these issues are addressed through the very concrete process of adopting law, they may have a greater ability to maintain the ecological environment.

Local empowerment can only be enabled in the context of just policies, integrated with ecology. According to Capra, the ecology is systemic, the web of life in the universe that sees there is always a mutual relation between man and nature. Man is not the ruler of the universe, only one part of the web of life. Whatever humans do to that web will ultimately impact on humans themselves (Capra, 2002).

Capra’s simplest example is the food chain, where an organism’s dependence on other organisms leads to mutualism. He notes that this example must spread across all of the mental concepts of society, so that everyone understands these interconnections. This linkage becomes an important force in society in maintaining its environment. In the broader scope, each part of society learns from the others, strengthening the value in their internal lives (Capra).

Capra’s offer is then linked to the environmental ethics of “deep ecology”. This belief system differs from anthropocentrism which views man as the centre of the universe, and elevates man and his interests to the most decisive role in the ecosystem order (Capra, 2002). The environmental viewpoint recognises that any one problem cannot be separated from, but is interrelated with, other problems. This is what Capra refers to as the web of life. In a similar overall perspective, local-born policies are attractive because people already hold strong environmental values, derived from their awareness of the importance of environmental sustainability.

By due consideration to both categories of interests (the interests of the government through policy and the awareness of society of integral environmental values), it is not difficult to maintain the quality of the environment. In this way, the law is able to organise and present a policy direction. It can autonomously organise itself, so that all necessary interests are incorporated by law. According Rahardjo, however, there is a universe outside the law that must be seen from the widest angle. It cannot be separated from the existence of law.

From this perspective, it is impossible for a policy to escape the need to understand the web of life as a network of entities or co-inhabitants. Local wisdom should not be separated from the needs and government of the people. The law should not disconnect these elements, because to do so will cause interference.

Thus, community awareness through local environmental wisdom can be seen as a strategy to mobilise the wider community in order to blend on-the-ground realities with the pattern of common life. The government can leverage this perspective so that its policies are not separated from what they are entrusted to protect.

From this starting point, policy cannot be separated from the importance of awareness of the reality of local wisdom. It is precisely this view that encourages and enables people to treat nature holistically. Like the Sedulur Sikep, they recognise that their natural position is related to how they treat the environment for all. Local wisdom and values encourage all who understand them to treat nature well – a choice that will have implications for their lives.

In viewing, analysing and creating policy, government must have a way to see these positions as they interrelate with each other. Such a worldview cannot possibly be approached instinctively, but must also involve one’s intellect and conscience.

The bearers of the law must use intellectual, emotional, spiritual and prophetic intelligence to be able to interpret positive laws, living law, and moral and spiritual values (Warassih, 2016). Especially when it comes to the construction of operational permits for the cement plant, current regional policy should be rejected or reconsidered if it has only taken economic factors into account, rather than being based on an understanding of all of the relevant underlying factors. Instead, decisions must combine the ecological with socio-cultural issues. This sensitivity is very important for policy makers. Moreover, it must be remembered that, as noted above, some regulations make local wisdom the legal principle that must be considered in the management of the environment and the utilisation of natural resources.

Conclusion

The authors come to two conclusions: first, the “prosperity and more prosperity” view that perceives development solely in terms of economic improvement cannot become the dominant factor underlying the development of regional policies. Such policies must also be in tune with the values of local wisdom. Second, empowering local communities to call for decision making that is informed by local wisdom is important. It is a key step toward making regional policy development into a mechanism for the promotion of eco-literacy. The public opposition of Sedulur Sikep to the PT SMS mining permits is based on their respect for and glorification of nature. These are the values that should form the basis for awareness in policy development. More broadly, this awareness will have implications for sustainable community development.

References


Global climate change leads to an increase in the average annual temperature, which, in its turn, results in melting of glaciers and rising sea levels. In addition to global warming, there is also an unbalancing of all natural systems, which leads to a change in precipitation patterns, temperature anomalies and an increase in the frequency and intensity of extreme weather events, such as hurricanes, floods and droughts. Scientists agree that human activity, i.e., the burning of oil, gas and coal, contributes to a greenhouse effect and causes an increase in average temperatures.

Experts note that, between 2000 and 2010, the most significant increase in greenhouse gas (GHG) emissions over the past 30 years was observed (Kurbatova and Tarko, 2015). According to the World Meteorological Organization (WMO), the GHG concentration in the atmosphere reached an all-time high in 2014. We do not see carbon dioxide (CO2); it is invisible, but a frightening real threat. It means an increase in global temperatures, an increase in the number of extreme weather events, such as floods, melting of ice, rising sea levels and increased ocean acidity (Russian Federal Service for Hydrometeorology and Environmental Monitoring, 2016).

According to climatologists, in order to keep the temperature increase below 2°C, all countries need to halve global emissions by 2050 relative to the 1990 level and, by the end of the 21st century, global emissions should be brought down to zero (Russian Federal Service for Hydrometeorology and Environmental Monitoring, 2016). According to PricewaterhouseCoopers analysts, since 2000, on average, Russia has reduced CO2 emissions by 3.6 percent per year, Britain – by 3.3 percent, France – by 2.7 percent, and the US – by 2.3 percent. The average annual reduction in carbon emissions over the past 15

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years was 1.3 percent (Russian News Agency TASS, 2017). However, the result of all these efforts has been disappointing. In order to prevent an irreversible climatic shift, the annual reduction of CO₂ emissions up to 2100 should be at least 6.3 percent. This means that it is necessary to introduce energy-saving technologies on the one hand and to switch to alternative energy sources on the other (Anisimov and Ryzhenkov, 2014).

According to scientists, if GHG emissions remain at the same level, by the year 2050 a quarter of wildlife species existing today will disappear. Thirty years ago, no one could imagine that there would be a global threat that could endanger life on Earth as we know it. We cannot imagine a world without penguins, coral reefs, sea turtles and Polar bears, and we do not want to tolerate such a future (WWF, 2009).

To minimise the impact of climate change on wildlife, a variety of measures should be developed and translated into legislation in order to help wildlife to adapt to such changes. However, in the current Russian legislation (as well as that of the other former Soviet republics), there are no such adaptation measures. Of particular importance in this situation is the doctrinal interpretation of indicators for the impact of climate change on wildlife, the reflection of climate change in various ecological systems, as well as monitoring the numbers of wildlife and their habitat.

In this regard, opinions and decisions proposed in this article could be used by the representative and executive bodies of the State authorities of Russia and the CIS countries in developing new plans and strategies for the sustainable use and conservation of wildlife. This article may also be of interest to environmental lawyers carrying out scientific research on the effects of climate on biological diversity and the conservation of wildlife, as well as to ordinary citizens interested in global warming and its impact on wildlife.

**Forming the Legislation on Climate: History and the Present**

Climate change on Earth has become an irrefutable fact. Over the last century, the average temperature on the planet has increased by 0.74°C, with the most significant increase occurring in the last decades. Therefore, most ecologists and scientists agree that a significant contribution to the impending global warming is made by human activity, primarily related to the release of CO₂ and methane into the atmosphere (Eleusizov, 2012). Modern States pay great attention to regulating those activities that affect climate change. On the one hand, international cooperation in this field is expanding and a system of international legal regulation is being formed. On the other hand, States are improving their environmental legislation in general, by singling out the regulatory framework for climate protection as a separate group. For people of all continents, their connection with nature is the very basis of life. Regrettably, for many centuries, this relationship has had a purely consumer character, when people devoted a great deal of effort to exploiting nature’s offerings in general and wildlife in particular (Tikhomirov, 2013).

However, in recent decades, rapid scientific, technological and trade-economic progress has led to significant damage to the environment and natural resources. More and more noticeable changes in the world’s climate, unexpected weather patterns, and high temperature rises, are prompting us to look for ways to ensure a sustainable climate. In order to solve this problem, various scientific, technological, legal and organisational measures are applied in different countries and continents, and the world community now regards tackling the climate challenge to be the most important (Tikhomirov). UN Secretary-General Ban Ki-moon considers global climate change to be “the most defining problem of our era” (Econet, 2014) and more than once has urged world leaders to reinforce their efforts to negotiate climate-change issues in a more constructive way. This statement reflects the degree of concern and interest of UN bodies and the world community in the problem of climate change and its possible negative consequences.

Human activity is the dominant cause of global warming, which is mainly due to an increase in the concentration of GHGs in the atmosphere. The ability of natural systems to absorb GHGs is limited. Therefore, ever-increasing anthropogenic emissions of GHGs lead to a steady increase in their concentration in the atmosphere and to global warming (Ministry of Natural Resources of Russia/National Information Agency-Nature, 2017). Recent studies in the field of climatology have increasingly led to a judgement that there is a relationship between the average global temperatures and the concentration of CO₂ in the atmosphere. There is no doubt that the global warming that has been recorded over the past few years is undeniable and unusual in terms of the observed cyclical climate changes (Rahmstorf and Schellnhuber, 2009). Already, the current concentrations of GHGs in the atmosphere are unprecedented in the last 800 thousand years. Global emissions of CO₂ could grow to 80 billion tons in 2050 and exceed 100 billion tons by 2100. As a result of this increase in emissions, the accumulation of GHGs in the atmosphere is four times higher than the global “carbon budget”, left to retain warming within 2°C. This border is one of the “natural” limits of development (Ministry of Natural Resources of Russia/National Information Agency-Nature). Huge economic, political and technological processes aggravate the problem. Changes in the environment that threaten the wellbeing and existence of mankind are added to the usual natural phenomena. Climate serves as a kind of specified indicator of its state and dynamics, and requires serious efforts on the part of all sciences. Legal science and practice are called upon to contribute to the solution of climate problems (Tikhomirov).

In legal literature, climate is defined as a special favourable property of the environment, which is a legally protected interest. This property is important for the sustenance and livelihood of humankind, for present
and future generations. The anthropogenic impact on the climate threatens not only favourable living conditions, but also basic survival on Earth (Semenikhina, 2010). The 1985 Vienna Convention for the Protection of the Ozone Layer defines “adverse impact” as “changes in the physical environment or biota, resulting from climate change which have significant deleterious effects on the composition, resilience or productivity of natural and managed ecosystems or on the operation of socio-economic systems or on human health and welfare” (Kolosov and Krivchikova, 1997).

According to the 1992 UN Framework Convention on Climate Change (UNFCCC), climate change is directly or indirectly caused by “human activity that alters the composition of the global atmosphere and which is in addition to natural climate variability observed over comparable time periods” (UNFCCC, 1992). Thus, the recognition of human-induced climatic change, and the dangers and negative consequences associated with it should be the starting point for taking legal regulatory measures and developing an adequate policy in the field of combating and mitigating climate change, as well as for information policy and shaping of public opinion on this matter, which, undoubtedly, requires appropriate motivation and demands political will from those in power (Steurer, 1999).

It should be borne in mind that climate change has significant consequences for the habitual way of life. Among the possible consequences of climate change, scientists cite an increase in average temperatures, a change in the balance of humidity and precipitation, the destruction of stratospheric ozone, and changes in the water system; all these effects could ultimately lead to a demographic, economic and social crisis, such as a shortage of food, epidemics and, probably, large-scale natural disasters (Kovats et al., 2000).

A significant role in addressing the problem of climate change belongs to the system of UN bodies and the WMO. Thus, under the aegis of the WMO and with the participation of the United Nations Environment Programme (UNEP) in 1979, the World Climate Programme was adopted, which was the starting point for major new initiatives in the field of ozone-layer and climate protection. This joint initiative of WMO and UNEP laid the groundwork for future cooperation and the establishment of the Intergovernmental Panel on Climate Change (IPCC).

In addressing climate change, law plays an important role. In particular, it is thanks to law that the sustainability of climate characteristics is recognised as a kind of universal imperative. Production and other processes related to natural resource accounting are regulated; the human right to a favourable environment is guaranteed; citizens and legal entities, municipalities and the State are responsible for protecting and preserving nature and wildlife; law fixes the system of restrictions and prohibitions, and measures of responsibility for violation of environmental rules; and there is State cooperation in the sphere of environmental protection and action on climate change (Tikhomirov).

Scientific research has shown that it is impossible to achieve a positive environmental effect in each separate direction without taking into account the mutual influence of various effects on the atmosphere. Temperature, humidity, wind, as well as the presence of various chemicals in the atmosphere, affect the state of the ozone layer, and the state of the ozone layer, in its turn, affects the state of the atmosphere and the associated climatic changes, such as global warming. The effect of ozone on climate is mainly reduced to changes in temperature. The temperature, among other things, also depends on the total ozone amount. The greater the ozone amount in a certain layer of the atmosphere, the more heat it accumulates (Ilyasov, 2014). Understanding of the seriousness of global environmental problems such as ozone depletion and climate change by the international community led to the signing of the Vienna Convention for the Protection of the Ozone Layer (1985) first, then of the Montreal Protocol on Substances that Deplete the Ozone Layer (1987), and then of the UNFCCC (1992) followed by its Kyoto Protocol.

The Vienna Convention provides for the development of a system of measures for controlling the production and turnover of a number of ozone-depleting substances (Kolosov and Krivchikova). In particular, according to Article 2 of the Convention, it is the duty of participating countries to take appropriate measures to protect human health and the environment against adverse effects resulting or likely to result from human activities which modify or are likely to modify the ozone layer. As has already been noted in the legal literature, one of the most important achievements related to the adoption of the Vienna Convention was the key agreement of its Parties at the international level on the need to take joint action on the global environmental problem, even in the absence of 100 percent credible scientific evidence of a corresponding threat: this was the first example of the adoption of an international treaty on the basis of the “precautionary principle” (Brack, 2003).

The Montreal Protocol – a protocol to the Vienna Convention – entered into force in 1989. It established lists of controlled substances that destroy the ozone layer, the production and consumption of which must first be limited and then reduced to zero. In addition, the import of such substances into the participating countries was also limited. The specific deadline for the complete phase-out of an ozone-depleting substance depends on how high its ozone-depleting potential is.

Simultaneously with the adoption of the Montreal Protocol, there was an active development and international cooperation in counteracting climate change. Thus, on 6 December 1988, the UN General Assembly (UNGA) adopted a climate protection resolution, which noted that the problem of climate change was common to all mankind and called for immediate and responsive action on a global scale (UNGA Resolution 43/53). The Resolution called upon all governments, intergovernmental and non-governmental organisations to take climate change as a priority issue, and to initiate special research programmes,
including programmes at the regional and national levels, and all available means to support efforts to protect the global climate.

Another milestone in the international climate movement, the World Climate Conference was held in Geneva in November 1990 to the results of the first IPCC report (Rodda, 1981). For the first time, this conference clearly stated facts not only about climate variability, but also about climate change and related risks. The ministerial declaration adopted on the results of the conference enshrined the most important principles: recognition of climate change as a common problem of mankind, recognition of common but differentiated responsibilities, the principle of equality, and commitment to the concept of sustainable development. The UNFCCC was adopted to prevent a dangerous anthropogenic impact on the Earth’s climate system due to the continuing emission of GHGs into the atmosphere. It includes a set of legal, organisational and economic measures to reduce the adverse effects of climate change.

Another basic international document in the sphere of climate protection was the Kyoto Protocol to the UNFCCC. It called on the States participating in the UNFCCC to reduce CO$_2$-equivalent emissions to 95 percent of 1990 base levels. Currently, experts are already unequivocal in stating that, during its period of operation which formally expires in 2020, the Kyoto Protocol has not allowed for real tangible results to reduce the level of GHG emissions (National Energy Security Fund, 2016).

Then, in 2015 at the UN World Climate Conference in Paris, 195 delegations from around the world approved a global agreement that should replace the Kyoto Protocol. The main objective of the Paris Agreement was to achieve a significant reduction in GHG emissions and thereby keep the average temperature rise on the planet within the target range of 1.5–2°C (Kazarina, 2016). The treaty is a framework project; its participants have yet to specify levels of GHG emissions, measures to prevent climate change, and the rules for implementing this document. Nonetheless, its adoption is an important step in addressing the problem of climate change and it consolidates the basic principles and system of global action for the period from 2020.

Russia has committed to creating a plan for adaptation to climate change and reporting on its implementation from 2020. The Russian Federation plans to reduce GHG emissions to 70 percent of its 1990 level. Thus, modern international law on climate protection and the practice of its application provide a legal basis for the further development and implementation of national climate policy at the level of individual States. In particular, the Russian Federation has adopted a number of normative legal acts aimed at implementing the norms of international law in the sphere under consideration (Decree No. 378, 1992).

Thus, the problem of climate change is a revealing example of one of the environmental problems of globalisation. It is closely connected with the most discussed problems at the world level: transboundary air pollution, depletion of the ozone layer, loss of biodiversity, freshwater pollution and changes in the properties of the world’s oceans, land and forest degradation, etc. The climate – as the sum total of ecological processes – has no State borders. Therefore, international legal norms contribute to the coordinated activity of States. The fulfilment of these norms is connected with a set of actions of an economic, legal, scientific and technical, and organisational nature (Kleiner, 2011). It is the complexity of the actions of States at all levels – from national structures to regional, local organisations and enterprises – that allows one to consistently solve problems in this area (Zhuikov, 2012). Unilateral tardy actions sharply reduce the overall climatic effect at community, country and international levels.

The recognition by international UN conferences that there is a climate change problem certainly contributes to the implementation of legal, organisational and economic measures aimed at reducing the adverse effects of climate change. However, without corresponding national legislation in place, implementation is difficult, if not impossible – particularly given that most international acts are not self-executing.

This is a problem for Russia; however, addressing climate change will contribute to the implementation of the sustainable development agenda for the period up to 2030. It is also expected that international agreements on climate change will have a positive impact on the achievement of sustainable development goals.

**Adaptation of Wildlife to Climate Change**

According to experts, global warming will be the main cause of wildlife extinction. If the average temperature rise on Earth for several decades is going to be +2°C, then the planet is in danger of a catastrophe. Climate change already has a significant impact on nature. The first signs of the adverse effects of global warming or its potential impact on wildlife have already been analysed by scientists in many countries. Despite recognition of the dangers of these phenomena and measures taken, emissions continue to grow and threaten the conservation of biodiversity, the normal functioning of the agricultural sector, the interests of the territorial integrity of individual countries, and the realisation of human rights (Brinchuk, 2009). Climate change is so fast that affected wildlife species do not have time to adapt to it.

It is not surprising that the increase in the average annual air temperature has affected wildlife in many countries. In Kazakhstan, for example, global warming has led to the early nesting of ground jays in the Ile District, noted in the first part of February. Some scientists suggest that global climate change may explain this change – i.e., that it is a result of the sensitive reactions of wildlife (Mustafina, 2015).

Climate change can have a positive impact on some species of animals, but for others – negative. The changing environmental conditions under the influence of the current climate trend sometimes favour range expansion and even an increase in the numbers of some
wildlife species, but for others this leads to deterioration in the conditions for their survival in the wild. For example, with successful nesting, the chicks of Ile ground jays fly out of the nest earlier and adapt to the environment more quickly, before the onset of summer heat.

According to some scientists, we are in the middle of a mass extinction of wildlife, the sixth mass extinction in the history of the Earth. But today’s extinction has been caused by human activities. If climate warming does not stop, a lot of ecosystems and the wildlife species that they contain will become less diverse. There are forecasts for extinction of up to 30–40 percent of plant and animal species, as their habitat will change faster than they can adapt to these changes (Kazarina). Assessing the anticipated scale of the consequences of climate change, the organisation Worldwide Fund for Nature (WWF) is promoting climate change policies, interaction with enterprises to reduce carbon emissions, and helping people and nature adapt to climate change (WWF, 2016).

Experts say that climate change is likely to be the main cause of biodiversity loss in the future, but additional pressure on ecosystems from exploitation and abuse leads to their degradation and loss of the total area. Replacement of forest tundra in the Arctic, the loss of habitat in Europe, North Africa, desertification, rising sea levels in the Asia-Pacific, hurricanes in the Caribbean, and the temperature increase in the polar regions – these are just some of the effects of climate change which we can observe. Most of these consequences cannot be prevented or restored in a short time. Therefore, it is necessary to improve the ability of wild animals to adapt to changes in their habitats.

According to the IPCC’s definition, adaptation is the process of adjustment of natural or anthropogenic systems to actual or expected climate and its effects, which “seeks to moderate or avoid harm or exploit beneficial opportunities”. Adaptation activities cover five main components: surveillance; assessment of the impact of climatic factors and vulnerability; planning; implementation; and monitoring and evaluation of results (IPCC, 2014).

In Russia, activities to develop and implement adaptation measures to climate change are being carried out. The Ministry of Natural Resources and the Environment of the Russian Federation has repeatedly stressed the need for adaptation, and its unconditional expediency (i.e., not dependent on the causes of climate change and on the political and economic context of measures to reduce emissions). Thus, a comprehensive plan contains prompt actions and long-term measures of adaptation to climate change (Ministry of Natural Resources, Russian Federation, 2011). The Plan for the implementation of a set of measures to improve State regulation of GHG emissions and preparations for the ratification of the Paris Agreement, which includes the preparation of a national adaptation plan for unfavourable climate change in July 2018, were also approved.

In developing the draft national plan for adaptation to adverse effects of climate change, adaptation measures were proposed in agriculture, forestry and other sectors. In agriculture, for example, the following are among the proposed measures to adapt to climate change:

1. the development of the agricultural sector of the economy;
2. optimisation of the ratio of winter and spring crops;
3. expansion of crop areas of more heat-loving crops and second crops;
4. development of irrigated agriculture;
5. strengthening and developing the activities of the federal and regional quarantine and plant protection services, especially at the borders of present-day distribution areas of the main climate-dependent pests and disease-producing factors of agricultural crops.

Similarly, in forestry, adaptation requires improved methods and technologies for monitoring, reliable regional prediction and effective elimination of fires, diseases and harmful insects. Measures for adaptation have also been developed in the Russian Federation’s Arctic zone, power economy sector and public health service. However, similar measures have not been developed in regard to wildlife. The direct effects of climate change, such as droughts and floods, are already having a negative impact on wildlife biodiversity and ecological systems.

There are two main ways to minimise the effects of climate change on wildlife biodiversity: through mitigation of environmental effect and through adaptation. Mitigation includes actions that need to be taken to reduce GHG emissions and keep their concentrations below dangerous levels. To this end, global warming was the main theme of the World Economic Forum in Davos in 2016, which recognised that global warming is perceived as the most pressing problem for humankind.

In a document for the forthcoming UNGA meeting, analysts warned that climate warming could lead to a shortage of food and water, and also increase the risk of floods. At the summit, it was announced that participating States intended to interact with Japan, Canada and the EU countries with regard to their proposal to halve GHG emissions by 2050. In addition, the summit called for further meetings with representatives of Brazil, China, India, Mexico, South Africa and other major emitters of CO2 to discuss the necessary components to combat global climate change (Eleusizov).

Russian officials believe that setting quotas for harmful emissions and using other tactical measures will ease the severity of the problem for some time, but will not solve it completely. For that, qualitatively different approaches are needed. It should be about introducing fundamentally new technologies that do not damage the world around them, but coexist in harmony (Kazarina).

Adaptation in the context of the protection of natural resources in the face of climate change is defined as human actions that are designed to minimise the adverse effects of climate change on human infrastructure and sensitive aspects of the natural environment (Heinz Center, 2007). With regard to the adaptation of animal species and their conservation, this means that the management of wildlife and its habitats must be carried...
out in such a way as to minimise the impact of climate change. In the context of public administration, adaptation planning is an important component of strategies, plans and conservation projects for wildlife.

Two major reasons accounted for this result: firstly, we already see clear signals of climate change in ecological systems, and we need to understand how to manage these changes. Secondly, even if we drastically reduce the level of GHG emissions, the planet will continue to experience warming for at least the next two or three decades due to gas emissions over the past 20 years (WWF, 2016). Plans to minimise damage from climate change should cover all areas of human activities. The ability of an ecosystem or a particular wildlife species to withstand the adverse effects of climate change will largely depend on its internal stability, that is, on its ability to resist and recover from changes in temperature, the onset of drought and other stresses. However, there is no guarantee that wildlife will be protected from the effects of climate change by measures aimed at promoting the sustainability of wildlife resources. The lack of sustainability in many systems and species makes them more vulnerable (Manomet Center for Conservation Sciences & Massachusetts Division of Fisheries and Wildlife, 2010). Biodiversity is the main environment-forming resource on the planet, providing the possibility of its sustainable development and preservation of the habitat for humans. Wildlife is one of the most important components of biodiversity, and plays a huge role in the life of society. It serves as a source for obtaining industrial, medicinal raw materials, foodstuffs and other material assets necessary to meet the needs of the population. If wild animals cannot adapt to climate change, the consequences for humans can be deplorable.

Society needs to adopt strategies aimed at implementing measures to enable wildlife to adapt to the effects of climate change. Specific activities should be directed, firstly, to the identification and conservation of those wild animals whose populations are prone to extinction, and secondly, to the conservation of the wildlife habitat and of ecological systems in general. This means the expansion of wildlife habitat, the creation of specially protected areas, the provision of the possibility of wildlife migration to other territories (Anisimov, et al., 2017). Based on the above, the author proposes the following measures to increase the sustainability of ecological systems, including wildlife:

- reduction of anthropogenic impact;
- preservation of wildlife biodiversity;
- protection of wildlife habitat; and
- sustainable management of wildlife.

These measures would allow the adaptation of wildlife to new conditions affected by climate change.

**Climate-Change Impact on Wildlife**

As noted, anthropogenic climate change is one of the main factors that can affect Earth’s ecosystems in the coming years and centuries (Stern et al., 2006). The role of human activity in the observed change is unambiguous. There is already convincing evidence of the impact of such a change on wildlife. The consequences of climate change on wildlife are manifested in changes of migration timing, changes in the numbers of animals, and changes in the distribution of wild animals in various ecosystems.

Due to their individual characteristics, each species reacts individually to any climate change. Wild animals are especially prone to the negative consequences of climate change. With respect to wildlife, it therefore appears that indicators should be formulated, reflecting the state of wildlife under the influence of climate change. For this purpose, the term “indicator” is a quantitative, qualitative or descriptive tool applied within wildlife management, which, together with periodic recording and monitoring, reflects changes in the status of wildlife and its habitat (Newson et al., 2009). The main aim of developing indicators for the climate change impact on wildlife is the timely prevention of changes in the number of wildlife populations, degradation of their habitat or other factors. Indicators should become the basis for adopting a set of measures aimed at minimising or mitigating the effects of climate change on certain wildlife species.

The following are a few examples.

**Polar Bears**

Scientific evidence suggests that a decrease in precipitation and an increase in temperature leads to a loss of migration sites and habitats for certain wildlife species (Sanderson et al., 2006), resulting in a population reduction. Thus, the number of Polar bears in the western part of Hudson Bay has declined due to the increase in spring temperatures and the disintegration of sea ice over the last 15–20 years as a result of climate change (Stirling et al., 1999). It is assumed that the early melting of ice leads to a deterioration in the living conditions of Polar bears, because they have less time to feed their young cubs. This fact also results in a lower survival rate of the young cubs. White bears prefer to be on the sea ice. In summer, when the ice begins to retreat to the north, most of the population remains on it, but some animals spend the season on the shore. Global climate change leads to a reduction in the area of sea ice in the Arctic – the key habitats of Polar bears. As a result, pregnant mothers who spend summer on the sea ice may have problems with access to the coast and islands for bedding in their dens. As more bears are forced to spend time on the coast, they often have problems with access to food, facing conflicts with people as well (Russian Geographical Society, 2015). Some scientists note that by the middle of the century, the Polar bear population may be reduced by two-thirds as a result of lost habitat. The main measure that can protect Polar bears and the entire Arctic marine ice ecosystem is the cessation of GHG emissions. To do this, it is necessary to take drastic measures on a global scale.

**Sea Turtles**

For more than 100 million years, sea turtles have repeatedly coped with adaptation to climate change, but
not the scale and speed that climate change has now acquired. Climate change is dangerous for sea turtles and their offspring, since the temperature of the nest clearly defines the sex of offspring: cold leads to producing male offspring, while heat contributes to the appearance of female ones. Warming of nesting sites reduces the number of male offspring and, thus, seriously threatens the viability of turtle populations. In addition, there is a reduction in habitats and feeding patterns (WWF, 2009).

This example indicates that wildlife population size is determined by the state of their habitat and ecological systems, and that one indicator of climate change impact on wildlife is wildlife population, based on government accounting and monitoring data.

**Seals**

As recent studies have shown, newborn seal pups are particularly vulnerable. In the first few months of their life, they require high levels of internal energy to maintain heat. With climate change, this is becoming increasingly difficult. Having studied the energy requirements of Kerguelen fur seals, the scientists found that, despite the fact that the planet is getting warmer every year, the stronger winds and increased humidity that are predicted in Antarctica can lead to a decrease in the survival rate among seals and their pups. They have to spend a greater percentage of their energy on getting warmer, leaving less for other biological functions such as growth. As a result, a large percentage of seal pups die (Denisova, 2012a).

This example suggests another indicator – the survival rate of wild animals’ offspring – which reflects the negative impact of climate change on the status of a population of selected wildlife species.

**Other Species**

As a result of climate change, the opportunity for wild animals to get food is getting worse. Such changes have important consequences for some species of penguins and other species inhabiting Antarctica and the sub-Antarctic islands, which cannot move from their breeding grounds in search for food.

In sub-Saharan Africa, due to the drier and less predictable climate, the number of habitats suitable for elephants is declining. An increased number of fires endangers the habitats of elephants, as fires destroy their food. By 2080, they will probably have left the places where they live today. Agriculture and human settlements prevent elephants from moving freely and changing their habitat. Also, due to droughts, there is a high probability that elephant calves will not survive (WWF, 2009).

**Other Indicator Areas**

Several driving factors are key climate-related challenges.

**Access to Food**

According to IPCC reports (Solomon et al., 2007), Africa will become one of the most vulnerable places for climate change, which will affect biodiversity, including that of African elephants. As noted, according to some researchers, if the calculated climate models are correct, and the Antarctic Peninsula becomes more windy and wet, this will affect the amount of energy to be spent by animals for growth. A driver of the above-described energy-for-growth problem leading to seal pup mortality is reduced access to food and climate change (Denisova, 2012a).

Thus, situations in Africa and Antarctica illustrate another indicator – reduced availability of food. At the same time, the above examples should be seen as warnings of the impending consequences for a number of wildlife populations.

**Essential Habitat**

Climate change exerts additional pressure on sea ice – the habitat of certain wildlife species – and, therefore, jeopardises their further survival and existence. It is expected that climate change will lead to a significant reduction in sea ice and snow cover (Solomon et al.). In the Arctic, Baltic and Caspian seas, the early sea-ice break is likely to reduce the scale of habitat reproduction for seals. In the absence of good snow-cover conditions, their pups become more vulnerable to unfavourable weather conditions, hunger and predation, leading to their high mortality (Smith and Harwood, 1998).

When the ice does not have time to form or starts melting early, as in recent years, seals face a serious threat to their existence. In 2010, 90 percent of seal pups that were born in the area of St Lawrence Bay died due to the lack of ice. In order to somehow mitigate the threat posed by climate-change-related melting of ice and to give seals a chance to escape extinction, the authorities should minimise the impact of other factors that threaten the lives of seals. First of all, this means commercial fishing (IFAW, 2016).

New research has shown that young Harp seals are less likely to survive due to global warming. Strong storms break the ice, and warmer waters, which are heated up due to rising temperatures, reduce the thickness of the ice cover, which Harp seals need for survival in the very first few weeks of their life, when they are particularly vulnerable. Without a thick, hard ice cover, seal pups fall off the ice and drown or fall under the cracking blocks of ice. For Harp seals, ideal ice should be 30–70 cm thick, and cover 60–90 percent of the water in the area where they live. According to marine biologist, Garry Stenson, a specialist of the Federal Department of Fisheries and Oceans of Canada, ice thickness in the North Atlantic reduced by about 6 percent in the period 1970–1980. If global warming is on the rise, the ice will continue to get thinner, which means that the number of surviving Harp seal pups will be fewer. For example, in 2007, more than 75 percent of young seals in Canada died due to poor ice conditions, and in 2010 practically none of them survived (Denisova, 2012b).

Thus, the indicator of the state of ice as a habitat illustrates the impact of climate change on individual wildlife species and their populations. Simultaneously, as a result of climate change, there is an imbalance between the elements of the ecological system, wild
animals being the key element of them. Thus, two indicators of climate change impact on wildlife are (i) the state of the biological balance between all components of the ecological system and (ii) the state of ecological systems with the potential to be negatively impacted by climate change. Within these, sub-indicators include change in the habitat; decrease in population; reduction of the range of migration routes and habitats; land degradation, forest/vegetation destruction; survival rates; and access to food.

In General

The impacts of climate change on wildlife are the result of complex interactions between the global climate, regional climate, and individual ecosystems with other anthropogenic pressures, including fisheries, pollution and habitat loss. It is important that these indicators are related to the conservation of wildlife biodiversity. When developing concepts and strategies for the sustainable use and conservation of wildlife, it is necessary to take all these factors into account.

Conclusion

At present, reducing CO₂ emissions into the atmosphere is the main goal of almost all countries, the implementation of which will allow for suspending the process of climate change and minimising its consequences. Moreover, in order to reduce the impact of climate change on wildlife, measures for wildlife adaptation to such changes should be developed. Regrettably, there is no such set of measures in the Russian legislation. In this regard, the developed doctrinal indicators for the impact of climate change on wildlife are the tools, which determine the degree of impact on various ecological systems, the reduction in wildlife populations, the destruction of habitats, and the status of populations. Based on these indicators, it is possible to develop adaptive measures for wildlife and their habitats.

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UNGA Resolution 43/53 (Protection of global climate for present and future generations of mankind).


Notes
1 The Commonwealth of Independent States (CIS) is an international organisation aimed at regulating cooperative relationships between member States that were formerly part of the USSR (not all of them). The CIS is not a supranational entity and operates on a voluntary basis.
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Cover photo: Plastic waste polluting tropical coral.

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