



BIODIVERSITY LEGISLATION STUDY

A REVIEW OF BIODIVERSITY LEGISLATION IN 8 COUNTRIES

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About the Global Legislators Organisation (GLOBE International)

GLOBE International is an international organisation comprising national parliamentarians from over 80 countries committed to developing and overseeing the implementation of laws in pursuit of sustainable development. GLOBE is a non-party political organisation that supports legislators through national chapters to develop and advance laws on climate change, natural capital accounting and forests. With headquarters in London, offices in Beijing, Bogota, Brussels, Kinshasa, Manila, Mexico City, New Delhi, and Tokyo and through chapters established in over 40 legislatures, GLOBE is developing a unique international network of legislators committed to practical action. GLOBE's mission is to create a critical mass of legislators that can agree and advance common legislative responses to the major global sustainable development challenges.

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Acronyms

ABS	Access and Benefit-Sharing
BL	Biodiversity Law
CBD	Convention on Biological Diversity
CITES	Convention on International Trade in Endangered Species of Wild Fauna and Flora
CONAGEBIO	National Biodiversity Administration Committee (Costa Rica)
COP	Conference of the Parties
CMS	Convention on Migratory Species
FAO	Food and Agriculture Organization of the United Nations
GMO	Genetically Modified Organism
ILCs	Indigenous and Local Communities
IFA	Institute of Fishing and Aquaculture
ILA	International Law Association
IPR	Intellectual Property Rights
ITPGRFA	International Treaty on Plant Genetic Resources for Food and Agriculture
MAT	Mutually Agreed Terms
MEE	Ministry of Environment and Energy
NBF	National Biodiversity Framework (South Africa)
NBSAP	National Biodiversity Strategy and Action Plan
NDA	Nature Diversity Act (Norway)
NECA	Natural Environment Conservation Act (Korea)
NGOs	Non-Governmental Organizations
PIC	Prior Informed Consent
SAC	Special Areas of Conservation
SADC	South African Development Commission
SANBI	South African National Biodiversity Institute
SEPL	Socio-ecological production landscapes
SINAC	National System of Conservation Areas (Costa Rica)
SPA	Special Protection Areas
SPS	Phytosanitary Protection Service
TK	Traditional Knowledge
WSL	World Summit of Legislators

Foreword by the Director of the World Future Council and the President of GLOBE International

Welcome to the Biodiversity Legislation Study, a collaboration between Globe International, the World Future Council and the Centre for International Sustainable Development Law (CISDL) supported by Norway's Ministry of Climate and Environment.

Biodiversity is essential to the functioning of the ecosystems that provide us all with health, wealth, food, water and other vital services that our lives depend on. However, due to habitat destruction, pollution and climate change, we are facing a severe biodiversity crisis and witnessing the loss of biodiversity at an unprecedented rate. The international community has agreed upon ambitious biodiversity targets (the Aichi Targets) under the Convention on Biological Diversity. National governments are urged to take strong action to safeguard the highest standards for the conservation and sustainable use of biodiversity.

Comprehensive biodiversity legislation at the national level are indispensable to reaching global biodiversity targets. This study presents and compares comprehensive biodiversity laws from eight countries. It aims to serve as inspiration and guidance for legislators around the globe to advance biodiversity legislation within their own political processes. GLOBE's international network of legislators is a meaningful tool in sharing this knowledge and information.

The Biodiversity Legislation Study comes at a time when we are close to the halfway mark on the timeline for the Aichi Targets. Biodiversity conservation needs to be a priority on the global and national environmental and development agendas. We want to highlight the importance of comprehensive biodiversity legislation and we challenge legislators to work towards introducing comprehensive biodiversity legislation in their own countries. In doing so, legislators can contribute to ensuring that biodiversity continues to be the bedrock of society, ecology, human wellbeing and economy.



Alexandra Wandel
Director World Future Council



Hon. Cedric Frolick MP
President GLOBE International

Executive Summary

Countries have worked to implement the provisions of the Convention on Biological Diversity since its adoption in 1992 and entry into force in 1993. Because the Convention is a framework treaty on conservation, sustainable use of biodiversity and sharing of benefits arising out of the utilization of genetic resources with mainly aspirational goals, it has been difficult to objectively measure whether Parties have implemented its provisions by law, policy or other measures. Given the global community's failure to meet the 2010 Biodiversity Target, it appears that States were unable to implement the terms of the Convention in substance and effect. It is thus clear that countries need legal guidance on how to conserve biodiversity, sustainably use its components, and share the benefits resulting from the use of genetic resources.

At the tenth Conference of the Parties to the Convention in Nagoya Japan in 2010, GLOBE members issued the Nagoya Declaration on Parliamentarians and Biodiversity which recognized the event as a crucial juncture for international commitment to achieving sustainable development and pledged support for the Strategic Plan on Biodiversity 2011-2020 and the Aichi Biodiversity Targets, the establishment of an ABS Protocol, and the increase of financial resources to support developing countries. At Rio+20, the international community reiterated its commitment to the achievement of the three objectives of the Convention, called for urgent actions that effectively reduce the rate of, halt and reverse the loss of biodiversity, and affirmed the importance of implementing the Strategic Plan and achieving the Aichi Targets in this regard.

The work of the Parties to the Convention in the past 20 years provides a concrete path toward achieving the objectives of the Convention. Yet, an analysis of country and regional examples can assist in demonstrating how the decisions of the Parties can be implemented in a tangible manner. This study looks at the biodiversity-specific legislation of a series of countries (Costa Rica, India, Japan, Norway, South Africa, South Korea and Vietnam) and one region (European Union) to analyse how the provisions of the Convention can be implemented in law. The case studies are used to conduct a comparative analysis, and conclusions are drawn to determine the most effective measures for implementation of the Convention. Parliamentarians are encouraged to consider how to use these measures in their own national situations.

1. Introduction

The Convention on Biological Diversity¹ (CBD) is a framework convention adopted in 1992 with the aim of conserving biodiversity, ensuring the sustainable use of its products, and guaranteeing the fair and equitable sharing of benefits resulting from the use of genetic resources.² It entered into force in 1993 and has 194 Parties as of 18 May 2014 with the accession of South Sudan.

Since the entry into force of the Convention, The Parties have adopted three Protocols - the *Cartagena Protocol on Biosafety*³ (Cartagena Protocol) in 2000, the *Nagoya – Kuala Lumpur Supplementary Protocol on Liability and Redress to the Cartagena Protocol on Biosafety*⁴ (Nagoya-Kuala Lumpur Protocol) in 2010, and the *Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits resulting from their Utilization*⁵ (Nagoya Protocol) in 2010 – and developed guidelines on topics such as Biodiversity and Tourism,⁶ Indigenous Peoples,⁷ Invasive Alien Species,⁸ Sustainable Use,⁹ Biodiversity Impact Assessment,¹⁰ and The Ecosystem Approach.¹¹ The *Strategic Plan on Biodiversity 2011-2020*, adopted at the tenth Conference of the Parties (COP) in Nagoya, Japan, provides a road-map for the comprehensive implementation of the CBD, and its twenty Aichi Biodiversity Targets provide objective global goals to direct and measure action.

COP 10 also saw the adoption of the GLOBE Nagoya Declaration on Parliamentarians and Biodiversity (Nagoya Declaration),¹² which expresses deep concern over biodiversity loss globally, recognizes the essential role played by governments in translating international consensus into domestic legislation, and calls for a transition into a global economy that more accurately values biodiversity, ecosystem services and natural capital.¹³ The Nagoya Declaration identifies synergies between the Strategic Plan and GLOBE initiatives, including increasing political awareness of the value of biodiversity through the Natural Capital Initiative, creation of a leadership group to advice the Natural Capital Action Plan, reducing direct pressure on biodiversity through the Legislator Rainforest Initiative, and promotion of sustainable marine management through the Marine Ecosystem Recovery Strategy. The Nagoya Declaration states that these initiatives are also aimed at

¹ *Convention on Biological Diversity*, 1760 UNTS 79; 31 ILM 818 (entered into force 29 December 1993). [CBD].

² *Ibid*, Art 1.

³ *Cartagena Protocol on Biosafety*, 29 January 2000, 2226 UNTS 208 (entered into force 11 September 2003) [Cartagena Protocol].

⁴ *Nagoya-Kuala Lumpur Supplementary Protocol on Liability and Redress to the Cartagena Protocol on Biosafety*, 15 October 2010, Annex to UN Doc. UNEP/CBD/BS/COP-MOP/5/17. [Nagoya-Kuala Lumpur Protocol].

⁵ *Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilization to the Convention on Biological Diversity*, 29 October 2010, UN Doc. UNEP/CBD/COP/DEC/X/1. [Nagoya Protocol].

⁶ *Guidelines on Biodiversity and Tourism Development*, COP Decision VII/14.

⁷ *Akwé: Kon Voluntary Guidelines for the Conduct of Cultural, Environmental and Social Impact Assessment regarding Developments Proposed to Take Place on, or which are Likely to Impact on, Sacred Sites and on Lands and Waters Traditionally Occupied or Used by Indigenous and Local Communities*, COP Decision VII/16; and *Tkarihwaï:ri Code of Ethical Conduct to Ensure Respect for the Cultural and Intellectual Heritage of Indigenous and Local Communities*, COP Decision X/42.

⁸ *Guiding Principles for the Prevention, Introduction and Mitigation of Impacts of Alien Species that Threaten Ecosystems, Habitats or Species*, COP Decision VI/23.

⁹ *Addis Ababa Principles and Guidelines for the Sustainable Use of Biodiversity*, COP Decision VII/12.

¹⁰ *Voluntary Guidelines on Biodiversity-Inclusive Impact Assessment*, COP Decision VIII/28.

¹¹ *The Ecosystem Approach*, COP Decision VII/11.

¹² *Globe International, Nagoya Declaration on Parliamentarians and Biodiversity*, (26 October 2010), available at: http://www.globeinternational.info/images/PDF/natural-capital/nagoya_declaration_on_parliamentarians_and_biodiversity_26_10_10.pdf. [Nagoya Declaration]

¹³ *Ibid*, Nagoya Declaration, *preamble*.

improving the status of biodiversity, to enhance the benefits of biodiversity and ecosystem services, and enhancing implementation through participatory planning and capacity-building programs.¹⁴

At the 2012 United Nations Conference on Sustainable Development (Rio+20), States reaffirmed the intrinsic value of biodiversity, as well as the ecological, genetic, social, economic, scientific, educational, cultural, recreational and aesthetic values of biodiversity and its critical role in maintaining ecosystems that provide essential services, which are critical foundations for sustainable development and human well-being; recognized the severity of global biodiversity loss and degradation of ecosystems and emphasize that these undermine global development, affecting food security and nutrition, provision of and access to water, health of the rural poor and of people worldwide, including present and future generations; and highlighted the importance of the conservation of biodiversity, enhancing habitat connectivity and building ecosystem resilience.¹⁵ States also reiterated their commitment to the achievement of the three objectives of the CBD and called for urgent actions that effectively reduce the rate of, halt and reverse the loss of biodiversity, affirming the importance of implementing the Strategic Plan on Biodiversity 2011-2020 and achieving the Aichi Biodiversity Targets.¹⁶ Lastly, States supported mainstreaming the consideration of the socio-economic impacts and benefits of the conservation and sustainable use of biodiversity and its components, as well as ecosystems that provide essential services, into relevant programmes and policies at all levels, in accordance with national legislation, circumstances and priorities; and encouraged investments, through appropriate incentives and policies, that support the conservation and sustainable use of biodiversity and restoration of degraded ecosystems, consistent and in harmony with the CBD and other relevant international obligations.¹⁷

At Rio+20, legislators from 85 countries convened from 15-17 June 2012 at the first GLOBE World Summit of Legislators (WSL) where they adopted the Rio+20 Legislators' Protocol.¹⁸ The opening text begins by recognizing that implementation of the original Rio objectives has been hampered by the absence of effective transposition into national legislation; an effective accountability structure to monitor governments' implementation of the Rio agenda; and the full and effective engagement of finance and economic ministries, providing a basis for long-term sustainable development. It then recognizes the role of legislators in developing, passing and overseeing the implementation of national legislation; scrutinizing the performance, and raising the level of ambition, of governments; approving budgets and national accounts; advancing the natural capital approach within their respective countries; fostering debate and promoting education on sustainable development with social justice and respecting cultural diversity; and, promoting parliamentary diplomacy on sustainable development issues. Furthermore, the opening text recognizes the importance and value of highlighting and spreading good practices that exist in countries, including at the sub-national and city levels.¹⁹

On this basis, legislators at the WSL committed to carry out a series of actions, including:

- Strengthening governance for sustainable development at the international, regional and local levels;

¹⁴ *Ibid*, Nagoya Declaration, at p.2.

¹⁵ *The Future We Want*, Rio+20 Outcome Document, para 197.

¹⁶ *Ibid*, para 198.

¹⁷ *Ibid*, para 201.

¹⁸ See: <http://www.uncsd2012.org/index.php?page=view&type=13&nr=287&menu=27>

¹⁹ *Rio+20 Legislators' Protocol*, <http://www.globeinternational.org/world-summit/56-legislators-protocol>

- Strengthening the legislative response in parliaments to deliver the Rio objectives; increase legislative engagement on public policy on sustainable development and an inclusive green economy respecting national sovereignty; and,
- Develop a national legislators' plan to scrutinize governments on their Rio commitments and how they engage with the international processes and UN agencies on sustainable development, including initiating debates in legislatures, at least annually, to assess progress towards delivering the Rio objectives;
- Convene at the World Summit of Legislators to
 - Highlight and share best legislative practice;
 - Report on national progress under each of the objectives of the WSL (advancing legislation and strengthening scrutiny), and
 - Debate new international strategies for sustainable development

The Legislators' Protocol also calls on governments to ratify the Nagoya Protocol and support legislators in their efforts to advance legislation and strengthen scrutiny of governments' delivery of the Rio commitments.²⁰

Legislators now need guidance on developing biodiversity laws in this context. In a 2012 publication by CISDL and WFC,²¹ the following elements were identified as key substantive aspects of a visionary biodiversity law) strong governance over components of biodiversity, through the establishment of national, regional and local biodiversity bodies with participatory, transparent, and accountable decision-making; b) broad integration of biodiversity considerations into all policies and strategies, such as those governing climate change, forestry, land use, agriculture and marine management; c) creation of linkages between measures undertaken to fulfil CBD objectives on conservation, sustainable use and access and benefit sharing arising out of the utilization of genetic resources; d) establishment of a synergistic implementation plan for relevant biodiversity related obligations, such as the International Treaty on Plant Genetic Resources for Food and Agriculture, Ramsar Convention on Wetlands, Convention on International Trade in Endangered Species, Convention on Migratory Species, World Heritage Convention, Nagoya Protocol); e) development of a comprehensive scope that addresses relevant CBD obligations; f) provision of mechanisms for consultation and incorporation of indigenous and local communities and other relevant stakeholders in decision making; g) establishment of *in-situ* and *ex-situ* biodiversity conservation measures, including protected area management, which give due consideration to the rights of ILCs; h) creation of modalities that enable, integrate and reward the sustainable use of biodiversity; i) development of appropriate monitoring and compliance mechanisms to monitor ongoing biodiversity loss; j) protection, promotion and assurance of fair and equitable benefit sharing from the use of traditional knowledge, innovations and practices pertaining to biodiversity; k) inclusion of the precautionary, ecosystem, and preventative approaches as principles of interpretation and implementation; and l) development mechanisms for capacity building, awareness raising, incentivizing conservation and technology transfer.

The same publication identified the following mechanisms as key tools for implementation, monitoring and revision: a) financing mechanisms that are integrated into laws or policies to ensure the effective long term implementation of the law and related CBD objectives, and allow for further

²⁰ [http://www.uncsd2012.org/content/documents/715Signed World Summit of Legislators Protocol 17.06.12.pdf](http://www.uncsd2012.org/content/documents/715Signed%20World%20Summit%20of%20Legislators%20Protocol%2017.06.12.pdf)

²¹ Jorge Cabrera, Frederic Perron-Welch, Alexandra Wandel and Plarent Ruka, *Designing Future Just Laws on Biodiversity: Training Materials for Government Officials and Parliamentarians* (Hyderabad, India: CISDL and WFC, 2012)

incorporation and expansion of biodiversity and ecosystem services;²² b) development and creation of a strong legal institutional structure with powers of governance of implementation and the ability to leverage sanctions/penalties to encourage compliance; c) establishment of procedures for review, revision and refinement based on the collection of relevant information pertaining to biodiversity conservation and the status of implementation; and d) development of modalities for public participation among stakeholders in implementation, monitoring, review and revision of the legal framework in a synergistic manner with the five goals of the Strategic Plan and the Aichi Biodiversity Targets.²³

In this context, this Biodiversity Legislation Study analyses laws from eight jurisdictions - national laws from Costa Rica, India, Japan, Vietman, Norway, South Africa and South Korea; and a regional law from the the European Union - in light of the above points and the sustainable development law principles in the Annex, and undertakes a comparative analysis of the innovative measures used to implement the provisions of the CBD at the national level.

²² The strategic objectives are part of Goal 4 of the Strategy for Resource Mobilization adopted in CBD COP Decision IX/11.

²³ CBD COP Decision X/2.

2. Comparative Analysis

Objectives

The establishment of clear objectives in support of the conservation and sustainable use of biodiversity is at the core of all the laws surveyed. Acting as the basis for the overall framework, the articulation of the objectives have nuanced differences across jurisdictions, with the core commonality of aiming to promote conservation of biodiversity through sustainable use of biological resources. **Costa Rica** outlines a broad and multi-faceted objective which focuses on integration of biodiversity into policies and decision-making processes, promotion of cross-sectoral participation and public awareness, regulated access focused on equitable distribution of benefits, recognition of the rights, contributions and roles played by ILCs, promotion of international cooperation, adoptions of incentives for the preservation of biodiversity and establishment of a coordinated approach to biodiversity management focused on public/private empowerment.²⁴

Japan similarly takes an approach which articulates a wide ranging scope which includes conservation of biodiversity, prevention of damage caused by invasive species, and the promotion of appropriate land use measures, but also aims to prevent global warming, promote the use of surveys, environmental impact assessments, and international cooperation and coordination on biodiversity issues.²⁵

In developing a framework for the conservation of natural habitats, the **EU** addressed domestic tensions with local land owners and industry by establishing a more precise scope focused on ensuring the preservation of biodiversity through conservation of natural habitats.²⁶ The design and implementation of measures aims at maintenance, restoration and conservation of habitats of community interest and must take into consideration the socio-economic, cultural and regional character of the area.²⁷ The more narrow scope places additional focus on the key socio-cultural considerations which underlay implementation of conservation measures. **India** puts forward a broad but tightly worded objective providing for the conservation of biodiversity, sustainable use and encouraging the fair and equitable sharing of benefits arising from the use of biological resources and traditional knowledge.²⁸ Use of such a broad scope allows for the underlying details and supporting components which encourage conservation, sustainable use and proliferation of ABS to be incorporated into the Act and Regulations in a non-restrictive manner. **South Africa** also identifies the core obligations of the CBD as the key rationale for the law, including sound management and sustainable use of biodiversity, ensuring fair and equitable sharing of benefits among stakeholders arising from use of biodiversity, and providing a cooperative governance framework to give effect to international commitments on biodiversity.²⁹

Norway establishes a comprehensive scope which outlines that the protection of biodiversity through conservation and sustainable use must be done in a way which provides a basis for the socio-cultural well-being of current and future generations and in a way which is respectful of indigenous culture.³⁰ The incorporation of multi-generational equity, socio-cultural awareness and alignment with the cultural drivers of indigenous local communities is a key differentiator. **South**

²⁴ Costa Rica Biodiversity Law, Art 10.

²⁵ Japan Basic Environment Law, at Art 3; Basic Act on Biodiversity, Art 1.

²⁶ EU Habitat Directive, *Preamble*.

²⁷ EU Habitat Directive, Art 2.

²⁸ India BD Act, *Preamble*.

²⁹ South Africa NEMBA, Art 2.

³⁰ Norway Nature Diversity Act, s. 1.

Korea establishes that sustainable utilization of the natural environment is aimed toward empowering communities to lead leisurely and healthy lives in a comfortable natural environment through systematic conservation.³¹ Framing conservation efforts in a way which encourages a healthy lifestyle in harmony with the natural environment illustrates the broad public policy basis which supports conservation efforts. **Vietnam** establishes that biodiversity conservation efforts must encourage sustainable development, with the Act outlining the rights and obligations of organizations, households, and individuals in this regard.³²

Principles

Sound principles inform the implementation of the objectives outlined at the onset and identify the functional aspects of conservation and sustainable use of biodiversity. **Costa Rica** explicitly identifies a respect for all living things, the strategic and intrinsic value of biodiversity which is indispensable to the socio-economic and cultural fabric of the nation, a respect for cultural diversity which promotes the proliferation of practices and knowledge aimed at conservation of biodiversity, and intra and inter-generational equality.³³ Additionally, implementation of biodiversity conservation and sustainable use measures are to be based on criterion aimed at prevention of anticipated risks to biodiversity, based on the precautionary approach, taking into account public interests in the environment including food security, ecosystem integrity and protection of human health, and broad integration of components of biodiversity conservation and sustainable use into sectoral and intersectoral strategies, activities and programs.³⁴

The **EU** outlines the process and criteria designated for the establishment of Special Areas of Conservation (SAC) requiring Member States to propose a list of sites with information regarding each site within three years of notification of the Habitat Directive, establishment of a draft list of sites of community importance, and work to incorporate those sites of community importance into the SAC framework within six years or less.³⁵ Appropriate conservation measures are to be developed and implemented under the SAC framework to avoid habitat degradation, with a restriction on all projects and plans to be carried out in a designated area, with approval only being granted in cases where there is no significant negative effect.³⁶

Japan aimed to establish fundamental guiding principles for national, regional and local strategic sustainability and biodiversity planning,³⁷ which include a respect for unique regional environmental conditions, sustainable and minimally intrusive use of biodiversity guided by scientific evaluation, adoption of a long-term recognition of ecosystem regeneration, and recognizing the impacts of global warming on biodiversity.³⁸ A national biodiversity strategy was developed to promote conservation efforts in a harmonized manner and provides basic principles of conservation, biodiversity conservation targets, comprehensive strategic policy planning and any additional measures as needed, along with an annual review.³⁹

³¹ South Korea NECA, Art 1.

³² Vietnam Biodiversity Law 2008, Art 1.

³³ Costa Rica Biodiversity Law, Art 9.

³⁴ Costa Rica Biodiversity Law, Art 11.

³⁵ EU Habitat Directive, Art 4-5.

³⁶ EU Habitat Directive, Art 6.

³⁷ Japan Basic Act on Biodiversity, Art 1

³⁸ Japan Basic Act on Biodiversity, Art 3.

³⁹ Japan Basic Act on Biodiversity, Art 10-11.

India refers to both *in-situ* and *ex-situ* conservation of biodiversity,⁴⁰ with access and use of genetic resources and traditional knowledge restricted to non-detrimental applications and the user providing a declaration affirming the absence of any adverse effects.⁴¹ *In-situ* conservation must be done in conjunction with ILCs through the formation of specialized modalities and administrative bodies at the local level.⁴² Areas of importance can also be designated as Biodiversity Heritage Sites, with access to these sites restricted to ILCs.⁴³ Access to genetic resources and traditional knowledge requires the mandatory prior approval of the National Biodiversity Authority, based on the establishment of mutually agreed terms.⁴⁴

Norway establishes provisions for the sustainable use of biodiversity which include management objectives to maintain habitat, ecosystem and species diversity, and a general duty of care relating to biodiversity.⁴⁵ Official decision making procedures must be based on both scientific and traditional knowledge, the precautionary principle, the ecosystem approach, the ‘user pays’ principle, environmentally sound methods of operation, quality norms for biodiversity and the interests of ILCs.⁴⁶ Harvesting and removal of biodiversity must be done based on the principle of sustainable species management, with import, introduction and release of alien organisms based on a general duty of care, with release restricted if there is a risk of substantial adverse impacts on biodiversity.⁴⁷ A cross-sectoral approach to biodiversity governance is leveraged, using various types of conservation areas to flexibly encourage conservation of biodiversity and natural habitats, with proposals put forward for consultation and comment by municipal, country and central authorities, as well as indigenous authorities.⁴⁸ Genetic material, which is broadly defined, is identified as a common resource of the country which must be utilized for the greatest possible benefit of the environment and both domestic and international communities.⁴⁹ Collection and use of genetic resources and traditional knowledge requires a permit which includes equitable sharing of benefits and is aimed to protect the interests of ILCs.⁵⁰

South Africa governs biodiversity planning with the goal of providing an integrated and coordinated biodiversity planning process.⁵¹ In identifying critical biodiversity areas, explicit consideration must be given to climate change principles.⁵² Access to genetic resources requires a permit based on the prior informed consent of the State and the stakeholders providing the resource, including ILCs, and must ensure that benefits arising from use are equitably shared.⁵³

South Korea outlines that the natural environment must be conserved as a common resource of all people which must be used sustainably, and conservation of biodiversity must be done harmoniously so as to promote a functional balance which encourages healthy human activity, maintains an ecological equilibrium, shares the burden and benefits of biodiversity fairly, and

⁴⁰ India BD Act, Art 36(1).

⁴¹ India BD Act, Art 14-16.

⁴² India BD Act, Art 14.

⁴³ India BD Act, Art 7, 37(1).

⁴⁴ India BD Act, Art 5-6, 18(4), 21(1).

⁴⁵ Norway Nature Diversity, Art 4-6.

⁴⁶ Norway Nature Diversity, Art 7-14.

⁴⁷ Norway Nature Diversity, Art 15, 22-24, 26-30.

⁴⁸ Norway Nature Diversity, Art 33-39, 42-43.

⁴⁹ Norway Nature Diversity, Art 57.

⁵⁰ Norway Nature Diversity, Art 58.

⁵¹ South Africa NEMBA s 37.

⁵² South Africa NEMBA, Chapter 4.

⁵³ South Africa NEMBA, 80-83.

promotes cooperation on biodiversity conservation.⁵⁴ State and local governments bear the responsibility of governance and administration, with private sector actors required to consider the natural environment primarily and take the needed measures to prevent and restore ecosystem damage, and mechanisms established to allow public-private partnerships for the protection and conservation of the natural environment.⁵⁵ A consultative approach must be used, along with the development of a Basic Plan for Conservation of the Natural Environment, which is reviewed on a biennial basis.⁵⁶

Vietnam establishes a National Master Plan on Biodiversity Conservation which includes biodiversity goals, evaluation of the current status of biodiversity, important geographic locations, ecological functions, types of conservation zones, *ex-situ* conservation needs, use of a strategic environmental assessment, and an organizational plan for implementation.⁵⁷ The National Master Plan lays the groundwork for a coordinated approach to conservation at the provincial and local level, and implements a payment for ecosystem services platform.⁵⁸

Overall the common core principles identified are a coherent, comprehensive and harmonized approach to biodiversity conservation, recognition of inter/intra generational equity relating to the natural environment, the precautionary approach to governance, and ensuring that benefits arising from access are equitably shared.

Institutional Arrangements

The administration and governance of biodiversity differs marginally across jurisdictions. **Costa Rica** establishes an administrative body under the Ministry of Environment and Energy (MINAE) to oversee both the National System of Conservation Areas (SINAC) and National Biodiversity Administration Committee (CONAGEBIO),⁵⁹ with duties including administration of protected areas, ensuring environmental safety, promotion of conservation and sustainable use of ecosystems, regulation of access to genetic resources, IP rights, education and public awareness, incentives and administrative procedures including environmental impact assessments.⁶⁰ CONAGEBIO is a national independent multi-stakeholder commission which oversees and formulates policies on access to genetic resources and traditional knowledge and is made up of representatives across ministries as well as civil society.⁶¹

India centralizes governance of biodiversity in the National Biodiversity Authority⁶² but delegates administrative authority to State Biodiversity Boards⁶³ and Biodiversity Management Committees (BMCs).⁶⁴ BMCs are empowered to initiate and document available biological diversity including preservation practices, cultivation and breeding, and chronicling related knowledge using registers and electronic databases.⁶⁵ Seven members are nominated to sit on the BMC, with not less than one third of members being women, and not less than 18% being members of the Scheduled

⁵⁴ South Korea NECA, Art 3.

⁵⁵ South Korea NECA, Art 4-5.

⁵⁶ South Korea NECA, Art 7-10.

⁵⁷ Vietnam Biodiversity Law 2008, Art 9.

⁵⁸ Vietnam Biodiversity Law 2008, Art 12-15.

⁵⁹ Costa Rica Biodiversity Law, Art 13.

⁶⁰ Costa Rica Biodiversity Law, Art 22-113.

⁶¹ Costa Rica Biodiversity Law, Art 15.

⁶² India BD Act, Art 8-21.

⁶³ India BD Act, Art 22-25.

⁶⁴ India BD Act, Art 41.

⁶⁵ *Ibid.*

Castes/Scheduled Tribes.⁶⁶ BMCs collaborate with State and National biodiversity bodies⁶⁷ to establish a People's Biodiversity Registers (PBRs) as a system of comprehensive information on availability of biological resources and associated knowledge relating to the traditional uses.⁶⁸ Local persons knowledgeable on biodiversity such as herbalists, agriculturist, non-timber forest produce collectors/traders, are also explicitly incorporated as members of BMCs via State rules.⁶⁹

Japan empowered the Minister of the Environment to draft National Biodiversity Strategy, which incorporates opinions of civil society as represented by the Central Environmental Council, for submission to cabinet.⁷⁰ While the national government is empowered to formulate policy for conservation and sustainable use of biodiversity, local governments are also obliged to formulate localized implementation plans.⁷¹ **South Africa** similarly designates the Department of Environmental Affairs with powers of overall design, implantation and review of the national biodiversity framework.⁷² Ecosystem protection, administration of *ex-situ* collections, and governance of biological resources, including ensuring the fair and equitable sharing of benefits arising from access, are designated to the South African National Biodiversity Institute (SANBI).⁷³ **Norway** identifies the King (the State) as the highest power under the Act, but allows for the delegation of decision making powers and implementation to municipal authorities who show competency.⁷⁴ In practice, the Norwegian Ministry of Climate and Environment is the competent national authority, with responsibilities delegated to Ministry of Fisheries over marine biodiversity.⁷⁵

South Korea empowers the Minister of the Environment to draft and execute the Basic Policy for Conservation of the Natural Environment,⁷⁶ with state and local governments empowered to administer functions under their jurisdiction and to develop local and regional conservation plans in consultation with the Ministry of the Environment.⁷⁷ Likewise, **Vietnam** establishes a leading role for the Ministry of Natural Resources and Environment in designing and implementing the National Master Plan on Biodiversity Conservation, with Ministries, ministerial-level agencies and Provincial-level Peoples Committees empowered to implement the components of the Master Plan under their respective jurisdictions.⁷⁸

Legal and Policy Instruments/Content

Public Participation

Integration of measures for public participation are present in some of the cases studied. The **EU** requires that proper public consultation must take place prior to the implementation of components of the Directive.⁷⁹ **India** incorporates civil society representation into local BMCs as a way to ensure

⁶⁶ India, Biological Diversity Rules (2004), r 22(2), available at: http://www.wipo.int/wipolex/en/text.jsp?file_id=200357. [BD Rules]

⁶⁷ *Ibid*, India BD Rules, sub-r 22 (9).

⁶⁸ India BD Rules, sub-r 22 (6).

⁶⁹ Government of Arunachal Pradesh, Arunachal Pradesh State Biodiversity Rules r 23, available at: http://nbaindia.org/uploaded/pdf/notification/Arunachal_pradesh_Rules.pdf.

⁷⁰ Japan Basic Act on Biodiversity, Art 11; Basic Environment Law 1993 at Art. 41.

⁷¹ Japan Basic Act on Biodiversity, Art 4-5.

⁷² South Africa NEMBA, Art 38.

⁷³ South Africa NEMBA, s 10-11.

⁷⁴ Norway Nature Diversity, Art 62.

⁷⁵ Norway, Marine Resources Act, 2009.

⁷⁶ South Korea NECA, Art 6, 14.

⁷⁷ South Korea NECA, Art 7(1).

⁷⁸ Vietnam Biodiversity Law 2008, Art 11.

⁷⁹ EU Habitat Directive, Art 22(a).

that the interests of the community are integrated into the decision making and governance process.⁸⁰ **Japan** identifies responsibilities of the private sector and individual citizens in implementing measures aimed at conservation of biodiversity,⁸¹ i.e. the private sector is to conduct business in a biodiversity-friendly manner, in coordination with other sectors, while citizens are encouraged to cooperate and make voluntary efforts in support of the fundamental principles of conservation and sustainable use of biodiversity.⁸² **Norway** incorporates public consultations for proposals for protected areas, requiring cooperation among relevant public authorities and impacted stakeholders prior to public consultation being published in national newspapers.⁸³ Additionally regulations must be circulated to municipal, county, local and indigenous governments for comment. **South Africa** ensures that public consultations must be undertaken prior to the exercise of power under the Act, with notice published in both national and local newspapers allowing for an open period of 30 days for written comment.⁸⁴ **Costa Rica** provides for the participation of local communities, indigenous peoples, the private sector, NGO and other in the different structures created for the management of biodiversity (Regional Councils, National Council for Conservation Areas and the National Commission for the Management of Biodiversity, among others).

Environmental Impact Assessments

Environment Impact Assessments (EIA) are a common tool employed to gage the potential risk to biodiversity poised by a particular project. **Costa Rica** requires an EIA for a proposed project to be conducted in its entirety, even if the project will be rolled out in stages, which is submitted to the Technical Office under the MINAE for review. The National Technical Secretary develops guidelines for evaluation including natural or man-made impacts and identification of processes and activities which underlay impacts on biodiversity.⁸⁵ Public consultations on the impacts of the project are conducted by the National Technical Secretary, along with environmental hearings coordinated by the Technical Secretary and the Technical Office.⁸⁶ **Japan** indicates that an EIA must be conducted at the early stages of implementation of businesses projects that could adversely impact biodiversity, with the business to survey, predict and assess potential impacts of the business on biodiversity from the planning to implementation phases and to give proper consideration of conservation of biodiversity in developing the business as a result.⁸⁷ **Norway** uses broad triggers for the initiation of EIAs, indicating that prior to allocation of grants, or in the management of real property, special consideration must be taken of the impacts through use of an EIA, with regulations developed indicated how the EIA will be carried out. The Ministry can also order restoration and mitigation efforts to combat unforeseen damage to biodiversity.⁸⁸

South Korea levies a Cooperation Charge on the Conservation of Ecosystems which is proportionate to potential scale of damage to the impacted area as determined by an EIA.⁸⁹ **Vietnam** requires proposed projects in buffer zones adjacent to conservation zones to conduct an EIA and submit the results to an evaluation council for consideration and review, with adverse

⁸⁰ India BD Act, s 41(1); India BD Rules, r 22.

⁸¹ Japan Basic Act on Biodiversity, Art 4-7.

⁸² Japan Basic Act on Biodiversity, Art 6-7.

⁸³ Norway Nature Diversity, s 42-43.

⁸⁴ South Africa NEMBA, s 99-100.

⁸⁵ Costa Rica Biodiversity Law, Art 92-94.

⁸⁶ Costa Rica Biodiversity Law, Art 95-96.

⁸⁷ Japan Basic Act on Biodiversity, Art 25.

⁸⁸ Norway Nature Diversity, Art 53, 70.

⁸⁹ South Korea NECA, Art 46.

projects to be moved to a safe distance to preserve the integrity of the conservation area.⁹⁰ **India** empowers the central government to prescribe the use of an EIA where a project is likely to have an adverse effect on biodiversity with a view to minimizing or avoiding such impacts, and where appropriate involving public participation in the EIA process.⁹¹ **EU** Member States are to make an appropriate assessment of any plan which is likely to have a significant effect on conservation objectives,⁹² and are to set up a system on monitoring to insure that incidental capture and killing of animals does not cause significant negative impact on the species in question.⁹³ **South Africa** requires an assessment of the risks and potential impacts to biodiversity,⁹⁴ prior to the issuance of a permit for activities involving protected or threatened species, alien or alien invasive species, bioprospecting or export of indigenous biological resources.⁹⁵

Biodiversity Plans and Surveys

Comprehensive plans for the conservation of biodiversity and surveys of the state of biodiversity are used to harmonize and inform policy making in multiple jurisdictions. **Costa Rica** empowers a commission under the MINAE to develop the National Strategy for Biodiversity.⁹⁶ **Japan**, which adopted its first National Biodiversity Strategy in 1995 and updated it in 2002, 2007 and 2010, takes a strategic approach to harmonize conservation efforts around biodiversity. Development of a draft National Biodiversity Strategy was tasked to the Minister of Environment, with the views of civil society incorporated via consultation with the Central Environmental Council, to be submitted to cabinet for approval.⁹⁷ An annual review of biodiversity trends is further leveraged to inform further policy development.⁹⁸ **South Africa** requires the Minister of Environment to develop and adopt a National Biodiversity Framework, to be reviewed every five years, which establishes an integrated and coordinated approach to the management of biodiversity based on clearly articulated principles among all stakeholders, public, private and individual.⁹⁹ Designated bioregions must also develop and publish a bioregion plan in consultation with the Ministry, which must be reviewed every five years.¹⁰⁰ Individuals, organizations or state origins which aim to contribute to biodiversity conservation may also submit a Biodiversity Management Plan to the Ministry of Environment for review and allocation of responsibility for implementation to a competent body.¹⁰¹

South Korea requires the Minister of Environment to formulate a Basic Plan for Conservation of the National Environment, in consultation with central administrative agencies and relevant local leadership, which must be updated each decade, and reviewed every two years to assess the impacts.¹⁰² The contents of the Basic Plan are enumerated in the Act, and local and regional governments are expected to develop appropriate plans, in consultation and coordination with the Ministry, to implement the components of the Basic Plan under their jurisdiction.¹⁰³ Similarly, **Vietnam** designates the Ministry of Natural Resources and Environment to draft and publish the

⁹⁰ Vietnam Biodiversity Law 2008, Art 32(3).

⁹¹ India BD Act, s 36(3).

⁹² EU Habitat Directive, *Preamble*.

⁹³ EU Habitat Directive, Art 12.

⁹⁴ NEMBA, s 65.

⁹⁵ NEMBA, s 87.

⁹⁶ Costa Rica Biodiversity Law, Art 14.

⁹⁷ Japan Basic Act on Biodiversity, Art 11.

⁹⁸ Japan Basic Act on Biodiversity, Art 10.

⁹⁹ South Africa NEMBA, s 38-39.

¹⁰⁰ South Africa NEMBA, s 40-42.

¹⁰¹ South Africa NEMBA, s 43-45.

¹⁰² South Korea NECA, s 6, 8, 10(3).

¹⁰³ South Korea NECA, s 9, 25.

National Master Plan on Biodiversity Conservation, in coordination with ministerial-level agencies, which must be used to inform ministerial agency-level and provincial-level strategic planning.¹⁰⁴ The contents are again enumerated in the Act, with priority in implementation going to initiatives incorporated into the Master Plan on Biodiversity in cases of conflict with provincial/city planning strategies and land-uses.¹⁰⁵ Surveys of ecosystems, forests, marine environments, wetlands and invasive alien species are also used to support strategic planning and develop mitigation/restoration options.¹⁰⁶ **Norway**, in addressing risks to biodiversity in coordination with quality norms, shall through the competent national authority develop plans for the execution of activities in consultation with other impacted authorities to minimize, mitigate or avoid risks to biodiversity generally,¹⁰⁷ or in protected areas, national parks, protected landscapes, and nature reserves,¹⁰⁸ with plans to be announced publically.¹⁰⁹ **India** empowers the central government to develop national strategies, plans and programs for the conservation and sustainable use of biodiversity.¹¹⁰ **EU** Member States are to establish appropriate management plans specifically designed for the designated sites and integrated into other applicable development plans in coordinated manner.¹¹¹

Biodiversity Registers

India, through the empowerment of local BMCs to document biodiversity,¹¹² established a system of People's Biodiversity Registers (PBRs) to chronicle uses, types and knowledge pertaining to biodiversity.¹¹³ Currently, PBRs have been developed in fourteen states across India.¹¹⁴

Sanctions and Penalties

Many of the laws surveyed across jurisdictions incorporate penal or civil penalties for contravention of the terms of the Act, and actions which have a deleterious effect of biodiversity. **Costa Rica** empowers individuals to act in the defense of biodiversity, with both civil and criminal liability applied for offenses including unauthorized access to biodiversity, which is punishable by a fine of up to twelve salaries.¹¹⁵ **India** provides penalties for contravening acts including imprisonment of up-to five years and a fine which may exceed ten lakh rupees, with acts of companies resulting in joint or several liability for all officers unless they can show the act occurred outside of their knowledge or that due diligence was exercised.¹¹⁶ **Norway** provides for both coercive and penal provisions, with coercive fines that can be enforced against the parent organization, acts of wilful or negligent contravention of the act punishable by a fine and imprisonment not exceeding a year, and gross contravention punishable by a fine and imprisonment not exceeding three years.¹¹⁷ **South Africa** addresses contravening acts through an appropriate fine and a term of imprisonment not exceeding five years.¹¹⁸ **South Korea** indicates that acts of environmental degradation or in

¹⁰⁴ Vietnam Biodiversity Law 2008, Art 10-11.

¹⁰⁵ Vietnam Biodiversity Law 2008, Art 8-9, 11(2)(d).

¹⁰⁶ Vietnam Biodiversity Law 2008, Art 34, 50-53.

¹⁰⁷ Norway Nature Diversity, Art 13, 24.

¹⁰⁸ Norway Nature Diversity, Art 33, 35-36,

¹⁰⁹ Norway Nature Diversity, Art 42.

¹¹⁰ India BD Act, s 36(1).

¹¹¹ EU Habitat Directive, Art 6.

¹¹² India BD Act, s 41.

¹¹³ BD Rules, sub-r 22 (6).

¹¹⁴ National Biodiversity Authority of India, Peoples Biodiversity Register (2014), available at: <http://nbaindia.org/content/105/30/2/pbr.html>.

¹¹⁵ Costa Rica Biodiversity Law, Art 105, 110-112.

¹¹⁶ India BD Act, s 55-57.

¹¹⁷ Norway Nature Diversity, Art 73-75.

¹¹⁸ South Africa NEMBA, s 98.

contravention of the terms of the Act are punishable by imprisonment of a term not exceeding three years and a fine not exceeding twenty million won, with joint liability applied to organizations.¹¹⁹

Monitoring and Review

Monitoring and review measures are integrated into the legislation surveyed, but they have focused on review of strategic indicators as required in the strategic planning process to update the national biodiversity framework or planning tools, or to survey changes in biodiversity/alien invasive species.

Funding

Incorporation of a biodiversity fund into legislation is sporadic. India establishes a Local Biodiversity Fund with funds provided by way or grant or loan from national or state bodies, or through fees collected, for use in the promotion of conservation and sustainable use of biodiversity in the region with an annual report identifying expenditures.¹²⁰ **South Africa** creates a Bioprospecting Trust Fund to administer and dispense funds arising out of benefit sharing agreements and mutually agreed terms¹²¹ **Vietnam** indicates that funds for the promotion of conservation and sustainable use of biodiversity are allocated from state budgets, donations and fees collected, and must be used broadly for research, restoration and capacity building.¹²² The **EU** provides for co-financing of conservation sites between the EU Commission and Member States.¹²³

¹¹⁹ South Korea NECA, Art 63-65.

¹²⁰ India BD Act, s 42-46.

¹²¹ South Africa NEMBA, s 85.

¹²² Vietnam Biodiversity Law 2008, Art 73.

¹²³ EU Habitat Directive, Art 8.

3. Conclusions

The Convention and its Protocols provide a mandate for countries to develop laws and policies on the conservation and sustainable use of biodiversity, access and benefit sharing relating to genetic resources, the use of traditional knowledge relating to genetic resources, and biosafety. Countries have encountered some success and many obstacles in fully implementing its terms. This is mainly due to the complexity of implementing the Convention's terms in a clear and coherent fashion that functions alongside other existing laws and policies. The Strategic Plan on Biodiversity 2011-2020 provides guidance and targets on the way forward, but examples of effective national implementation are needed. The case studies identified a number of different approaches to the conservation of biodiversity, sustainable use of its components and ABS.

For those countries looking to prepare new legislation or revise existing legislation, the following were identified as fundamental: assessment of biodiversity and biological resources, including identifying impacts on biodiversity and ecosystems, drivers of biodiversity loss and possibilities for halting loss of biodiversity; establishing clear goals in advance to inform and inspire the provisions of laws and policies on biodiversity, thus providing guidance for the selection and drafting of instruments and mechanisms; ensuring that all relevant stakeholders are involved, including those from key government ministries, civil society and indigenous and local communities; identifying policy areas and laws that negatively affect biodiversity; identifying existing international obligations, including relevant COP decisions, as well as existing laws and policies on biodiversity; and undertaking a legal analysis of issues in light of the existing legal framework.

The substantive aspects of a future just biodiversity law should include: establishing strong governance over the components of biodiversity; integrating biodiversity into all policies and actions and establishing linkages between policies; establishing balance between measures undertaken to fulfil the three CBD objectives; implementing all relevant biodiversity related obligations in a synergistic manner; ensuring the comprehensiveness of the law; outlining the roles and responsibilities of all relevant stakeholders; recognizing the key role of indigenous peoples and local communities; establishing both *in-situ* and *ex-situ* conservation measures; creating incentive schemes for the sustainable use of biodiversity and ecosystems; developing instruments to monitor compliance; protecting, promoting and ensuring the sharing of benefits relating to the use of traditional knowledge, innovations and practices; including the precautionary principle, ecosystem approach and preventive approach as interpretive principles; implementing an ABS regime that meets the terms of the Nagoya Protocol and UN Declaration on the Rights of Indigenous Peoples; establishing safeguards to protect biodiversity from the risks posed by genetically modified organisms in accordance with the Cartagena Protocol and Nagoya-Kuala Lumpur Supplementary Protocol; developing mechanisms for awareness raising, education, incentives and technology transfer; creating mechanisms for public participation and access to justice; and including information mechanisms in co-ordination with international and regional bodies to adjust to new challenges and inform decision-makers and the public.

Lastly, tools must be put in place to ensure implementation, monitoring and revision of the law when necessary. The tools identified include: creating innovative financing mechanisms to ensure the long term success of the law and related CBD objectives; establishing strong legal measures and a suitable institutional structure with the power to oversee implementation, including sanctions and penalties for non-compliance; creating a review or update process that includes collecting information on progress in implementation and the status of biodiversity; ensuring the participation of a broad set of stakeholders in implementation, monitoring and revision; and developing targets

and implementing measures to further the five goals of the CBD Strategic Plan for Biodiversity 2011-2020 and meet its 20 Aichi Biodiversity Targets.

In conclusion, we urge all countries engaged in reversing the loss of biodiversity to adopt ambitious legal and policy measures that effectively safeguard the environment, respect human rights, and embody the highest standards of sustainability. The principles, examples and analysis provided in this paper provide a starting point and should serve as guidance to those countries seeking to engage meaningfully with one of the most complex issues of our time. Valuable lessons can be learned from the experiences of other countries in implementation, but no universal formula can be applied because countries will need to assess how the information provided can be best applied given their particular social, economic and ecological context. That remains to be determined by national decision-makers, preferably through an open and transparent process which engages with all segments of society in a respectful manner.

4. Survey of Biodiversity Legislation



4.1 Costa Rica, Ley de Biodiversidad (No.7788) of 1998

Background

Costa Rica holds a significant proportion of the world's known species (4.7%, SINAC 2009) in a relatively small territory due to its strategic geographic position (constituting a bridge between North and South America), its tropical location and variable topography which contributes to its microclimates. Hence, the country can be regarded as a complex mosaic of terrestrial and marine habitats, each one holding a particular combination of species. However, the distinctiveness of the country does not lie in the total number of described species recorded but in their density, meaning the number of species per unit area. In this category, Costa Rica surpasses all the megadiverse nations. Its tropical location between two continental land masses, with its varied marine and terrestrial geography, diverse climate conditions, and extensive system of rivers and lakes, foster conditions for the development of major biodiversity despite its small size. These elements help explain the unique high density of known species found in Costa Rica which no other country in the region exhibits. The best known groups of species are plants and vertebrates; for these two groups, an impressive 96% (11,467 plant species out of an expected 12,000) and 87% (2,665 vertebrate species out of an expected 3,073) have already been described.

Costa Ricans have undertaken several initiatives to conserve and use its biodiversity in a sustainable manner. Today, after successfully reversing a national deforestation trend and creating a number of wildlife protected areas, approximately 52% of Costa Rica's land area is covered with forests. Additionally, new initiatives are increasing the protection of marine ecosystems and some of them are already protected as marine national parks. Biodiversity has taken center stage in Costa Rica and this statement is supported by the following: Biodiversity is a main attraction for tourists which visit the country every year, making tourism one of the main sources of income. There are several eco-tourism enterprises –spread throughout the territory- that help improve the economy of people living in rural areas. In addition, Costa Rican society has implemented other economic incentives, such as the payment of ecosystem services, which are contributing to conserve its biodiversity. As a result, Costa Ricans have a heightened awareness about the value and contribution of biodiversity to development. It's considered among the 20 megadiverse countries in the world and has a well-known reputation for its efforts to conserve and use its biodiversity in a sustainable manner. The Country has created more than 171 protected areas encompassing around a 26% of the terrestrial territory in different management categories.

Analysis of Legislation

Drafting History

The first assessment of the state of knowledge on Costa Rica's biodiversity was performed in 1992 and it was the basis for the development of the first National Biodiversity Strategy published in 2000. The three key elements were established regarding biodiversity: saving, understanding and use.¹²⁴ Since the 70s Costa Rica has implemented a series of political tools for safeguarding the richness of ecosystems and biodiversity within it. These political initiatives are very well documented and had proven to be very successful, in this regard; the creation of a system of protected areas and a program for environmental service payments has facilitated to consolidate the actual framework for use of biodiversity in the country.

At international level the country ratified the Convention of Biological Diversity in 1994¹²⁵ and has had a very active participation on the international arena of biodiversity.

The process of drafting the Biodiversity Law is particularly relevant. The first draft was developed in 1996. It generated a negative reaction from different stakeholders that considered it to be especially restrictive and opposed to both the public good and scientific research. Multiple suggestions were made to the Legislative Assembly, including a complete new draft prepared by the Advisory Commission on Biodiversity which was never formally incorporated by the legislative course.

The second draft of the law appeared in January 1997. Even though this draft considered several of the objections made to the first draft, it also repeated several of the concepts and dispositions stated by the first version of the document. Therefore, it met with the same opposition. This situation led to the creation of a Special Commission in the Legislative Assembly. Its mandate was to create a new draft, taking into consideration the old one. The Assembly promised to respect the outcome.

The Commission, led by the National University, was installed in April 1997. It included the main political parties (National Liberation and Social Christian Unity), the Advisory Commission on Biodiversity (COABIO), the National Small Farmers Forum, the National Indigenous Forum, the Union of Chambers for Private Business, the University of Costa Rica (with two representatives), the National University (with two representatives), the Costa Rican Federation for Environmental Conservation (FECON) and INBio. The group was composed of twelve representatives and their alternates, named by sectors including the non-governmental sector, representatives of indigenous peoples and farmers, the private sector, the academic sector, and the government (by means of the Advisory Commission on Biodiversity). The Special Commission met until December 1997 when the new draft was sent to the Parliament. It received the favorable opinion of the Parliament's Commission on Environment, and after minor modifications, the text was finally adopted as law. It was published in The Gazette, the Official Diary, in May 1998 and entered into force as law of the republic the same year. As mentioned before this was a comprehensive legislation and access was only one of the topics covered. No foreign consultants participated in this process.

Some of the controversial aspects of the drafting process can be summarized in the following points:

¹²⁴ MINAE, Estrategia Nacional de Conservación y Uso Sostenible de la Biodiversidad (2000), V Obando et al (eds) at 13. [ENCB], available at:

<http://www2.inbio.ac.cr/es/biod/estrategia/Paginas/PDF/Conservaci%BEEn/ENBCRfinal.pdf>

¹²⁵ Costa Rica, Law 7416 (June, 1994) at Art. 1, available at: http://www.wipo.int/wipolex/es/text.jsp?file_id=221206

- There was disagreement about the access process and the entity entrusted with granting the permits and authorizations. These groups argued that the creation of a wider Commission to deal with access and related topics (e.g. National Biodiversity Strategy and CBD negotiations), integrated with diverse sectors, would propitiate a more suitable space and greater credibility concerning the control of the state over genetic resources.
- The public character of the genetic resources made them subject to a public property regime, independent of private ownership of the land where they were located, and created legal consequences to the rights of applicants of access.
- The integration of procedures regarding intellectual property with the procedures of the BL, since diverse exclusions have been established (Article 78), needs to be accomplished. The compatibility of some of these exclusions with the Agreement on Trade Related Aspects of Intellectual Property Rights is debatable.
- There were different views between those who conceived of access as a way of legitimizing biopiracy and those who, on the contrary, were defending the mechanism as a way to promote the sustainable use of the genetic and biochemical resources.
- There was a lack of information and participation by some groups such as indigenous communities, peasants, and private sectors, who were only able to express their points of view in relation to certain specific issues. It became clear that capacity building in the design of these legal frameworks is critical. The lack of sufficient information on comparable international experiences also prevented an understanding of real difficulties found elsewhere.

Due to the fact that the main policy aspects of the negotiation were included in the law, while the operative aspects were deferred to the bylaws (due to the representative character of the Legislative Assembly versus the regulatory duty of the Executive Power), the drafting process dealt with the main topics and their complexities.

Background of the Law

An earlier paper commissioned by the WFC came to a number of conclusions as to why the BL is novel and visionary.¹²⁶ The BL creates a legal framework in line with the principles and themes outlined in the CBD, beginning by setting one of its goals as promoting the conservation and sustainable use of biodiversity and ensuring the fair and equitable sharing of benefits derived there from.¹²⁷ The law aims to respond to this goal in an integrated and inter-related manner. This includes recognising the inherent value of nature, generally applicable principles of law, objectives, and criteria for applying the law.¹²⁸ It covers both the concept of tangible elements of biodiversity, as defined by the CBD, and intangible elements such as individual or collective knowledge, innovation and practices. It puts into effect sustainable development principles, like the precautionary principle. Other elements include a model of “objective” or “absolute” liability for harm, expansion of the pre-existing payment for environmental services program. The law also establishes a participatory system by creating regional and local councils in each conservation area,

¹²⁶ Jorge Cabrera Medaglia, Frederic Perron-Welch, Alexandra Keenan, Alexandra Wandel and Plarent Ruka, *Crafting Visionary Biodiversity Laws: Costa Rica's Biodiversity Law 1998*, Draft Paper Presented at the Central America Launch of the United Nations Decade on Biodiversity (WFC & CISDL: November 2011)

¹²⁷ Biodiversity Law, Art. 1.

¹²⁸ *Ibid.* at Arts. 8-11.

integrated by five elected members of different sectors from that geographical area. It establishes regulations regarding access to genetic resources and incorporates principles such as cultural denial, and recognizes different systems of intellectual property, e.g. farmers' rights and *sui generis* community intellectual rights. For this reason, the law prevents non-genetically modified plants, animals and microorganisms from being patented or made subject to intellectual property rights (IPR).

The general goal of the BL is to promote the conservation and sustainable use of biodiversity and to ensure the fair and equitable sharing of benefits derived from it (Article 1). The entire BL responds to this goal as put forth by the CBD. For example, it establishes the environmental function of the land (Article 8), general principles of the law (Article 9), objectives (Article 10), criteria for applying the law (Article 11); National System for Conservation Areas administrative structure (including the administration of the national wild protected areas, Articles 22 to 43), the guarantee of environmental safety (biosafety and exotic organisms, Articles 44 to 48), the conservation and the sustainable use of the ecosystems and species (Articles 49 to 61), the regulations on access to genetic resources (Articles 62 to 76), intellectual property rights (Articles 77 to 85), education and public awareness and research and transfer of technology (Articles 86 to 91), environmental impact assessment (Articles 92 to 97), incentives (Articles 98 to 104) and procedures and sanctions (Articles 105 to 113). All of these elements are in accordance with the three objectives of the CBD.

An important starting point in the legal biodiversity framework in Costa Rica is that the Law establishes the State has the exclusive sovereignty and control over the elements of biodiversity.¹²⁹ The Biodiversity Law also set the rules for the use and exploitation of biodiversity elements that also constituting a public property such as exploration, research and bioprospecting.¹³⁰

Objectives

The law's objective is the conservation of biodiversity and the sustainable use of biological resources as well as the equitable distribution of the benefits and derived costs of the use of its elements. The BL has a comprehensive list of objectives¹³¹:

1. To integrate the conservation and use of the components of biodiversity in the development of socio-cultural, economic and environmental policies.
2. To promote the active participation of all sectors of society in the conservation and ecological use of biodiversity, in the pursuit of social, economic and cultural sustainability.
3. To promote education and public awareness about the conservation and use of biodiversity.
4. To regulate access and in so doing make possible the equitable distribution of the environmental, economic and social benefits to all sectors of society, paying special attention to local communities and indigenous peoples.
5. To improve administration for effective management of the components of biodiversity.
6. To recognize and provide compensation for the knowledge, practices and innovations of indigenous peoples and local communities in the conservation and sustainable ecological use of the components of biodiversity.

¹²⁹ Decree 31514, Art. 2.

¹³⁰ *Supra*, Biodiversity Law, Art. 6.

¹³¹ *Ibid*, Article 10.

7. To recognize the rights deriving from the contribution of scientific knowledge to the conservation and sustainable ecological use of the components of biodiversity.
8. To ensure environmental safety to all citizens as a guarantee of social, economic and cultural sustainability.
9. To not limit the participation of any sector in the sustainable use of the components of biodiversity or in the development of research and technology.
10. To promote access to the components of biodiversity and the associated transfer of technology.
11. To promote international and regional co-operation to achieve the conservation, ecologically sustainable use and the distribution of benefits derived from biodiversity, especially in frontier areas or from shared resources.
12. To promote the adoption of incentives and the reward of environmental services for conservation, the sustainable use and the components of biodiversity.
13. To establish a system of conservation of biodiversity, that will achieve co-ordination between the private sector, the citizens and the State, to guarantee the application of this law.

Principles

The BL defines a set of principles guiding its interpretation and implementation. Some of the principles that can be extracted from the BL are¹³²:

1. Respect for all forms of life. All the living things have the right to live, independently of actual or potential economic value.
2. The components of biodiversity are valuable. They have decisive and strategic importance for the development of the country and are indispensable for the domestic, economic, social, cultural and aesthetic use of its inhabitants.
3. Respect for cultural diversity. The diversity of cultural practices and associated knowledge of the components of biodiversity should be respected and promoted, in conformity with national and international legal standards, particularly in the case of the peasant communities, the indigenous people and other cultural groups.
4. Intra- and inter-generational equity. The State and private individuals will watch over the sustainable utilization of the components of biodiversity to ensure that the possibilities, opportunities and benefits of their use will be guaranteed in an equitable manner for all sectors of society and will satisfy the needs of future generations.

In addition there are mandatory criteria for the implementation of the BL¹³³

1. Preventive criterion: It is recognized that it is of vital importance to anticipate, prevent and attack the causes of the loss of, or threats to, biodiversity.
2. Precautionary criterion: When danger or threats of grave or imminent damage to the components of biodiversity and its associated knowledge exist, the absence of scientific

¹³² *Ibid*, Article 9.

¹³³ *Ibid*, Article 11.

certainty should not be used as a reason to disregard the adoption of effective measures of protection.

3. Criterion of environmental public interest: The use of the components of biodiversity should guarantee development options for future generations, food security, the conservation of the ecosystems, the protection of human health and the improvement of the citizens' quality of life.
4. Criterion of integration: The conservation and sustainable use of biodiversity should incorporate the plans, programs, activities and sectoral and intersectoral strategies whose effects contribute to the process of development.

In general, there are some guiding principles- implicit in the entire text of the Law, such as:

- Equity in access and in the distribution of benefits derived from the use of the elements (genetic and biochemical) of biodiversity,
- Respect for human rights, especially the rights of groups that are marginalized because of their culture or socio-economic condition,
- Sustainable use of biodiversity, in order to respect the development options of future generations,
- Biosecurity in the broadest sense, including technological, environmental, alimentary and sanitary aspects, and
- Democracy as a guarantee of greater citizen participation in decision-making.

Institutional Arrangements

To undertake the administration of the law, it establishes an administrative body within the Ministry of Environment and Energy (MINAE) to oversee both the National System of Conservation Areas (SINAC) and National Biodiversity Administration Committee (CONAGEBIO).¹³⁴ Overall duties of SINAC and CONAGEBIO include the administration of national wild protected areas,¹³⁵ ensure environmental safety,¹³⁶ the conservation and the sustainable use of the ecosystems and species,¹³⁷ the regulations on access to genetic resources,¹³⁸ intellectual property rights,¹³⁹ education and public awareness and research and transfer of technology,¹⁴⁰ environmental assessment,¹⁴¹ incentives¹⁴² and administrative procedures and sanctions.¹⁴³ CONAGEBIO is a national independent commission which oversees and formulates policies on access to genetic and biochemical elements and protection of associated knowledge, as well as coordinating these policies with the relevant institutions. It also formulates and coordinates the policy for access to elements of biodiversity and associated knowledge, ensuring a suitable transfer of science and technology and the distribution of benefits. As a multi-stakeholder organization, it consists of governmental bodies such as the MINAE (which oversees it); the Ministries of Foreign Trade, Health and Agriculture; the Institute of

¹³⁴ *Ibid.* at Article 13

¹³⁵ *Ibid.* at Articles 22 to 43

¹³⁶ *Ibid.* at Articles 44 to 48. Includes biosafety and exotic species

¹³⁷ *Ibid.* at Articles 49 to 61

¹³⁸ *Ibid.* at Articles 62 to 76

¹³⁹ *Ibid.* at Articles 77 to 85

¹⁴⁰ *Ibid.* at Articles 86 to 91

¹⁴¹ *Ibid.* at Articles 92 to 97

¹⁴² *Ibid.* at Articles 98 to 104

¹⁴³ *Ibid.* at Articles 105 to 113

Fishing and Aquaculture (IFA); the National Commission of University Presidents; Indigenous and farmers' organizations; the National Union of Chambers; the Costa Rican Federation for the Conservation of the Environment (FECON), which represents NGOs, and the Director of National System of Conservation Areas.¹⁴⁴

Legal and Policy Instruments/Content

The BL includes substantive provisions and instruments on several areas, including:

Biosafety

The Biodiversity Law establishes provisions regarding genetically modified organisms in chapter III under the title “Guarantees of Environmental Safety”. It establishes that to avoid present and future damage to human, animal or plant health, or to the integrity of ecosystems, regulations establish mechanisms and procedures for access to elements of biodiversity for the purposes of research, development, production, application, release or the introduction of exotic or genetically modified organisms into the environment. The state is required to avoid all risk or danger which threatens the permanence of ecosystems and should also prevent, reduce or repair environmental damage that threatens life or deteriorates its quality. The civil liability of title holders or people responsible for the management of GMOs and any damage caused is set out in the *Organic Law of the Environment*,¹⁴⁵ the *Civil Code*¹⁴⁶ and other applicable laws. Criminal responsibility is set out in the existing legal regulations.

Any person who proposes to use GMOs created inside or outside Costa Rica in the agricultural sector for import, export, experimentation, research, transport, release into the environment, and reproduction or commercialization must obtain prior permission from the Phytosanitary Protection Service (SPS). All natural or legal persons, domestic or foreign, that carry out genetic manipulation must register with the Technical Office of CONAGEBIO. Any person can participate in the permitting process, give observations and submit documents in writing. They can also request the repeal or revision of any permit granted. The Technical Office can, Based on technical, scientific or security grounds, modify or repeal any permit granted. In the face of imminent harm, emergencies or failure to comply with official requirements, the Technical Office can seize, confiscate, destroy or return the GMOs.

Access and Benefit Sharing

The *Biodiversity Law* applies to elements of biodiversity under State sovereignty, and processes and activities carried out under State jurisdiction or control. Article 6 establishes that the biochemical and genetic properties of the elements of wild or domesticated biodiversity are part of the public domain. The State regulates the exploration, research, bioprospecting, and use of elements of biodiversity, as well as the use of all genetic and biochemical resources, through access standards established in Chapter V of the Law. All research or bioprospecting programs on the genetic or biochemical material of biodiversity that are carried out in Costa Rican territory require an access permit, unless they fall into one of the exceptions provided by Article 4 of the Law.¹⁴⁷

These exceptions include access to human genetic resources, the non-profit exchange of genetic and biochemical resources and the traditional associated knowledge resulting from the traditional

¹⁴⁴ *Ibid.* at Article 15

¹⁴⁵ *Ley N° 7554 - Ley Orgánica del Ambiente*, Online: <http://www.ccad.ws/documentos/legislacion/CR/L-7554.pdf>

¹⁴⁶ *Código Civil De Costa Rica*, Online: http://www.casadelosriscos.com/documentos/codigo_civil_costa_rica.pdf

¹⁴⁷ Costa Rica, *Biodiversity Law*, Articles 62 and 69

practices of indigenous peoples and local communities, and research by public universities (which have established their own controls and regulations relating to non-profit research on elements of biodiversity). All other sectors, including the pharmaceutical, agricultural, crop protection, biotechnology, ornamental, and herbal industries, which use the genetic properties of biodiversity are subject to the Law and must follow the access procedures.

The definitions of access and bioprospecting in the Law restrict its scope to genetic resources in public or private lands, terrestrial or marine environments, under *ex situ* or *in situ* conditions, and indigenous territories. The rules of indigenous people should be taken into account for access in their traditional territories, as should their *sui generis* community intellectual rights. Communities and indigenous peoples have the right to oppose access to their resources and associated knowledge for cultural, spiritual, economic or other reasons.

The access procedure is set out in two chapters of the Law. The competent body that grants access in the first place is the Technical Office of CONAGEBIO. CONAGEBIO is entrusted with preparing access and benefit-sharing policies and can revoke the rulings of the Technical Office on access issues. The main duty of the Technical Office is to process, reject, and audit applications to access biodiversity, and coordinate with the Conservation Areas, the private sector, indigenous peoples, and peasant communities on actions that relate to access. It is responsible for organizing and updating a register of access applications to the components of biodiversity, *ex situ* collections, and the natural and legal persons who work on genetic manipulations. The Technical Office must also collect and update regulations related to the fulfillment of treaties and guidelines on biodiversity issues.

Chapter V defines the requirements and procedures to access genetic and biochemical components and the protection of the associated knowledge. CONAGEBIO is expected to act as the mandatory consultative body for all application procedures for the protection of intellectual rights related to biodiversity. The Law regulates the basic requirements for access, which include prior informed consent (PIC), benefit-sharing, the protection of associated knowledge, and the way in which the activities will contribute to conservation. Chapter V also establishes the legal procedures to be followed, the Registry of access rights, and the protection of confidential information.

The Law also regulates the terms of access permits including their limitations and characteristics, the information required in a permit application, the authorization of agreements with individuals seeking access to genetic and biochemical components by the Technical Office, and the possibility of agreements with universities and other duly registered centers. It stipulates that, in addition to the payment of administrative expenses, up to 10 percent of the royalties must go to the Conservation Area, private owner, or indigenous territory. The Technical Office must always be consulted in processes where IPRs are granted for components of biodiversity, and its decision on these matters is binding.¹⁴⁸ Lastly, the BL establishes the grounds for the protection of traditional, indigenous and community knowledge and for the establishment of a participatory process for the determination and registration of these *sui generis* intellectual community rights. This is supported by a system of fines for illegal access¹⁴⁹ and a framework for sanctions.

Other relevant policy and legal instruments:

The BL contains provisions on key issues such as:

¹⁴⁸ However, this consultation process has been diminished by a regulation to the article 80, enacted as part of the implementation package of the CAFTA-DR Free Trade Agreement.

¹⁴⁹ Costa Rica *Biodiversity Law*, Article 112

- Payment for environmental services
- Incentives for the conservation and sustainable use of Biodiversity
- Environmental impact assessment
- Education and public awareness (including in transboundary situations)
- Capacity building, biodiversity research and technology transfer

Sanctions and Penalties

The BL established a popular action for the protection of biodiversity allowing every person to act in administrative or jurisdictional fields for the defence and protection of biodiversity.¹⁵⁰ In the matter of biodiversity, and in so far as an environmental jurisdiction does not exist, any controversy will be the exclusive responsibility of the contentious administrative jurisdiction.

As exceptions to the previous rule, offences against biodiversity will be judged by the penal jurisdiction. In the same way, controversies which arise between individuals, where there is neither administrative act nor public domain, will be the responsibility of the agricultural jurisdiction.¹⁵¹ The burden of proof, of absence of contamination or prohibited degradation or affectation, lies with the one who requests an approval, permit or access to biodiversity or who is accused of having caused environmental damage.¹⁵²

Civil responsibility for damage caused to the components of biodiversity is defined in article 99 and the following articles of the Organic Law of the Environment and the remaining relevant dispositions of the legal regulation.¹⁵³ Except the illicit situations typified in this law, penal responsibility will be that as prescribed in the Penal Code and special laws. To deal with offences committed by public officials or professionals in the exercising of their responsibilities or professions, the legal authority could impose the penalty of special disqualification for a maximum of up to five years, in accordance with the general criteria of the imposition of fines.¹⁵⁴

Whoever carries out exploration, bioprospecting or has access to biodiversity without authorization from the Technical Office of the Commission, when it is necessary in terms of this law or because of deviation from the terms granted in the permit, will be imposed a fine varying between the equivalent of one and twelve salaries, as established in article 2 of Law No. 7337.¹⁵⁵ For the purposes of this law, administrative faults and their correlative sanctions are understood as those established by the Organic Law of the Environment, the Law of Wildlife, Forest Law and in other applicable legislation.¹⁵⁶

Monitoring/Follow up and Review

No particular provisions exist which directly provides for a monitoring of review of the BL and the achievement of their goals. Activities for the monitoring of the biodiversity are included under the sections on biodiversity research of the Law.

¹⁵⁰ *Ibid*, Article 105

¹⁵¹ *Ibid*, Article 108

¹⁵² *Ibid*, Article 109

¹⁵³ *Ibid*, Article 110

¹⁵⁴ *Ibid*, Article 111

¹⁵⁵ *Ibid*, Article 112

¹⁵⁶ *Ibid*, Article 113

Funding

There are not specific sources of funding or particular mechanisms (such as a Fund) for the funding of all the actions required by the BL. The legal framework and the BL acknowledge the need for funding sources to manage and operationalize the registration and monitoring system for access of genetic and biochemical elements¹⁵⁷. By Law CONAGEBIO and the Technical Office will be provided with consignments, legacies and donations, contributions from registration and transaction, benefits from permits and concession and ten percent of the entrance fee to National Parks¹⁵⁸. Also a percentage of the research budget (10%) and bonuses it collects (up to 50%) must be deposit, in favour of the National System of Conservation Areas, the indigenous territory or the private owner providing access to the components¹⁵⁹.

Analysis and Lessons Learned

The biodiversity legal framework of Costa Rica is one of the most complete. The elaboration of the law was carried out following the provisions of CBD, Bonn Guidelines and broad participation of civil society.

In regards to broader benefits for biodiversity, some of the lessons learned include:

- The BL is one of the more comprehensive laws looking at the full implementation of the CBD. The BL addresses most of the relevant provisions of the CBD allowing the country to develop further regulations and instruments for the implementation of the general and sometimes conditional provisions of the Convention.
- The BL provides a balance between conservation, sustainable use and fair and equitable sharing of benefits arising from the utilization of genetic and biochemical resources. These three objectives are clearly linked in the text of the BL.
- Equity, protection or rights of indigenous peoples and local communities and participation in the decision making process (including the right to participate and over their knowledge) are features presented throughout the BL.
- Expanded and progressive interpretation of several CBD provisions, such as the inclusion of bio-chemicals in the ABS scope and the inclusion of exotic/invasive species in the biosafety framework.
- Incentives and technology transfer provision are incorporated in the Law.
- The BL introduces a set of guiding principles and objectives for interpretation and implementation, including the precautionary approach, conservation, and sustainable use.
- Strong institutional development was put in place to secure the conservation, sustainable use of biodiversity as well as the fair and equitable benefit sharing.
- Awareness raising and education have a considerable importance and weight in the BL design.

Although the Legal framework for Biodiversity of Costa Rica has been awarded by the World Future Council with the Future Policy Award 2010 as one of the best laws of Biodiversity¹⁶⁰ some

¹⁵⁷ *Supra*, Decree 31514 at Art. 63.

¹⁵⁸ *Ibid*, at Art.19.

¹⁵⁹ *Ibid*, at Art 19-20-37-42-43-76.

¹⁶⁰ See generally, El Financiero. Premian Ley de Biodiversidad de Costa Rica. M Cordero (October 2010) available at http://www.elfinanciero.cr/ef_archivo/2010/octubre/31/economia2567676.html; World Future Council, Future Policy Award 2010: Celebrating the world's best biodiversity policies, available at:

challenges continue at the international and national political level. The promulgation of one decree that has gone against the provisions of the law and which wanted to reform one article¹⁶¹, depriving commercial interest, have shown how susceptible may be the subject of intellectual property rights and traditional knowledge.

http://www.worldfuturecouncil.org/fpa_2010.html; Red de Coordinación en Biodiversidad, Nominación de la Ley de Biodiversidad de Costa Rica (2010) available at: http://redbiodiversidadcr.info/media/uploads/cyclope_old/adjuntos/nominacionleybiod17mar10ap1887.pdf.

¹⁶¹ Decree 34959 – MINAET-COMEX. This decree tried to introduce a modification to Article 78(6) on Form of and limits to protection. The decree was annulled by vote 09-9870 / 18147-12; Red de Coordinación en Biodiversidad, *Comparecencia Comisión Asuntos Ambientales Sobre el Protocolo de Nagoya Posición Red de Coordinación en Biodiversidad* (October, 2013).



4.2 European Union, Natura 2000

Background

For the European Union (EU), biodiversity is an issue of both domestic and international relevance.¹⁶² The rate of species extinction is unparalleled and driven primarily by human activities. In the EU, species reduction, habitat destruction and ecosystem degradation are all putting downward pressure on biodiversity with only 17% of habitats and species and 11% of key ecosystems being in a favourable state.¹⁶³ Despite domestic action taken to address biodiversity loss, increasing pressures due to land-use changes, over exploitation of biodiversity, the spread of invasive species, ongoing pollution and the increasing challenge of climate change all place growing strain on an already fragile system. In 2010, EU leaders identified shortcomings in their strategic biodiversity goals, and provided broad support for the adoption of both the CBD Strategic Plan for Biodiversity (2010-2020), and the Nagoya Protocol. In response the EU has developed a 2020 Biodiversity Strategy which empowers the EU to meet the objectives of their global environmental commitments.¹⁶⁴

Analysis of Legislation

Background of the Law

The EU's policy on nature conservation consists of two directives: The Council Directive 79/409/EEC on the protection of wild birds, adopted in 1979 (Birds Directive) and the Habitats Directive.¹⁶⁵ The adoption of the two directives falls into a time of general growing awareness on environmental problems and both were thus mainly the product of pressure from different NGOs as well as some Member States.¹⁶⁶

Before the 1987 Single Act the EU had no formal competence for environmental issues but it was agreed unanimously by the then nine Member States that the conservation of birds was a transfrontier responsibility requiring coordinated action. In the year of adoption of the Birds Directive EU Member States also adopted the *Bern Convention on the Conservation of European Wildlife and Natural Habitats* (Bern Convention).¹⁶⁷ The Convention included annexes of plant and animal species requiring protection. The incidental protection of many non-listed species was one of the

¹⁶² This section draws upon the unpublished work of Katharina Rogalla von Bieberstein in the framework of the IDLO Legal Preparedness for the Aichi Biodiversity Targets Initiative, 2012.

¹⁶³ European Union, "Communication from the Commission to the European Parliament, the Council, the Economic and Social Committee and the Committee of the Regions" COM(2011) 244, at 1, available at: <http://www.cbd.int/doc/world/eur/eur-nbsap-v3-en.pdf>. [EU Report to CBD 2011]

¹⁶⁴ *Ibid*, EU Report to CBD 2011, at 2-7.

¹⁶⁵ European Union, Council Directive 92/43/EEC, OJ L 206, 22.7 1992, p 7, available at <http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:01992L0043-20070101&from=EN>. [Habitat Directive]

¹⁶⁶ Evans D (2012) Building the European Union's Natura 2000 network. Nature Conservation (2012), at 11–26 doi: 10.3897/natureconservation.1.1808. [Evans]

¹⁶⁷ Council of Europe, "Nature Convention on the Conservation of European Wildlife and Natural Habitats, available at: http://www.coe.int/t/dg4/cultureheritage/nature/bern/default_en.asp.

reasons to list habitats rather than just species as for the annexes of the Bern Convention. In response to the Bern Convention, which was ratified in 1982, and after heated discussions, the Habitats Directive was finally adopted in 1992, the year of the adoption of the Convention on Biological Diversity (CBD). The Habitats Directive met a lot of resistance, especially from local communities, land owners and different industry sectors, but was warmly welcomed by the environmental community.¹⁶⁸

Regarding the EU legislative competence the preamble of the Habitats Directive states: “Whereas, in the European territory of the Member States, natural habitats are continuing to deteriorate and an increasing number of wild species are seriously threatened; whereas given that the threatened habitats and species form part of the Community's natural heritage and the threats to them are often of a transboundary nature, it is necessary to take measures at Community level in order to conserve them”.¹⁶⁹

Central to the Habitats Directive is the creation of ‘Natura 2000’, an EU-wide ecological network comprising all areas that are protected under the Birds (Special Protection Areas, SPAs) and the Habitats Directives (Special Areas of Conservation, SACs): composed of sites hosting the natural habitat types listed in Annex I and habitats of the species listed in Annex II). The main purpose of this network is to maintain or restore the habitats and species at a favourable conservation status in their natural range. The Habitats Directive lists habitat types and species that are considered to be most in need of conservation at the European level. And once established, the onus is on Member States to protect and restore the sites included in the network.¹⁷⁰ According to Article 23 (1) Member States must bring into force the laws, regulations and administrative provisions necessary to comply with this Directive within two years of its notification and inform the Commission thereof.¹⁷¹

Objective

The Habitats Directive aims to “contribute towards ensuring biodiversity through the conservation of natural habitats and of the wild fauna and flora”, thus contributing to the EU’s implementation of its commitments on conservation outlined in the CBD. Furthermore, measures taken pursuant to the Directive shall be “designed to maintain or restore, at favourable conservation status, natural habitats and species of wild fauna and flora of Community interest” and “take account of economic, social and cultural requirements and regional and local characteristics”.¹⁷² According to Article 1 (c) natural habitat types of Community interest means those which, within the territory referred to in Article 2: “(i) are in danger of disappearance in their natural range; or (ii) have a small natural range following their regression or by reason of their intrinsically restricted area; or (iii) present outstanding examples of typical characteristics of one or more of the nine following biogeographical regions: Alpine, Atlantic, Black Sea, Boreal, Continental, Macaronesian, Mediterranean, Pannonian and Steppic.”

¹⁶⁸ Compare Evans; Yrjö Haila, Maria Kousiset. al., “Building trust through public participation: Learning from Conflicts over the Implementation of the Habitat Directive” (2004), Participatory Governance and Institutional Innovation (PAGANINI), online: http://www.univie.ac.at/LSG/paganini/finals_pdf/WP4_FinalReport.pdf.

¹⁶⁹ *Supra*, Habitats Directive, Preamble.

¹⁷⁰ A FERN/TRN Briefing Note, Habitats Directive and Natura 2000, October 2004, online: <http://www.taigaescue.org/v3/files/pdf/96.pdf>; http://www.coastalwiki.org/coastalwiki/Birds_Directive,_Habitats_Directive,_NATURA_2000.

¹⁷¹ For the transposition into UK legislation compare e.g.: <http://jncc.defra.gov.uk/page-1374>.

¹⁷² *Supra*, Habitats Directive, Article 2.

Principles

Key provisions of the Habitats Directive concern the process of designating Special Areas of Conservation (SAC's), conservation measures on the designated sites as well as surveillance and monitoring instruments. According to Article 3 (2) of the Habitats Directive “each Member State shall contribute to the creation of Natura 2000 in proportion to the representation within its territory of the natural habitat types and the habitats of species referred to in paragraph 1”: sites hosting the natural habitat types listed in Annex I and habitats of the species listed in Annex II.

Institutional Arrangements

*The designation of SACs.*¹⁷³

1. As a first step and on the basis of the criteria set out in Annex III (Stage 1) and relevant scientific information, each Member State is required to propose a list of sites. The list shall be transmitted to the Commission, within three years of the notification of this Directive, together with information on each site.
2. On the basis of the criteria set out in Annex III (Stage 2) and in the framework both of each of the nine biogeographical regions and of the whole of the territory, the Commission shall establish, in agreement with each Member State, a draft list of sites of Community importance drawn from the Member States' lists identifying those which host one or more priority natural habitat types or priority species.
3. Once a site of Community importance has been adopted, the Member State concerned shall designate that site as a SAC as soon as possible and within six years at most, “establishing priorities in the light of the importance of the sites for the maintenance or restoration, at a favourable conservation status, of a natural habitat type in Annex I or a species in Annex II and for the coherence of Natura 2000, and in the light of the threats of degradation or destruction to which those sites are exposed.”¹⁷⁴

For exceptional cases Article 5 of the Habitats Directive outlines a procedure to designate a SAC even if the site was initially not listed by the Member State and after a bilateral consultation process.

Conservation Measures:

For SAC, Member States shall establish the necessary conservation measures and take appropriate steps “to avoid, in the special areas of conservation, the deterioration of natural habitats and the habitats of species as well as disturbance of the species for which the areas have been designated.”¹⁷⁵ Furthermore, any project and plan – either individually or in combination with other plans or projects – shall only be carried out on such an area if there is no significant negative effect or if there is no alternative solution, or for imperative reasons of overriding public interest, including those of a social or economic nature. In the latter case, the Member State shall take all compensatory measures necessary to ensure that the overall coherence of Natura 2000 is protected. For priority natural habitats (compare Article 1 (d) of the Habitats Directive), the conditions are even stricter.¹⁷⁶ In addition Member States must establish systems of strict protection for those animal and plant

¹⁷³ *Ibid*, Habitats Directive, Article 4.

¹⁷⁴ *Ibid*, Habitats Directive, Article 4 (4).

¹⁷⁵ *Ibid*, Habitats Directive, Article 6 (1), (2).

¹⁷⁶ *Ibid*, Habitats Directive, Article 6; Dr. Gyula Bándi, “Biodiversity Loss Permitted? Redesignation and Declassification of Natura 2000 Sites”, Legal Analysis Summary, Justice and Environment 2011, online: http://www.justiceandenvironment.org/files/file/2011_natura_summary%281%29.pdf.

species which are particularly threatened (Annex IV) and study the desirability of reintroducing those species in their territory as well as prohibit the use of non-selective methods of taking, capturing or killing certain animal and plant species (Annex V).

Legal and Policy Instruments/Content

The Ecological coherence of the Natura 2000 network

Another important and innovative provision is Article 10 of the Habitats Directive: “Member States shall endeavour, where they consider it necessary, in their land-use planning and development policies and, in particular, with a view to improving the ecological coherence of the Natura 2000 network, to encourage the management of features of the landscape which are of major importance for wild fauna and flora. Such features are those which, by virtue of their linear and continuous structure (such as rivers with their banks or the traditional systems for marking field boundaries) or their function as stepping stones (such as ponds or small woods), are essential for the migration, dispersal and genetic exchange of wild species.” This provision refers to core-areas and corridors: By improving spatial connectivity and reducing fragmentation these two components form essential components of so-called ecological networks.¹⁷⁷

The definition of a site of community importance (Article 1 (k)) as well as the assessment criteria of proposed SAC by Member States in Annex III (Stage 2) also highlight the coherence of the network (also referred to in Article 3 of the Habitats Directive) as an important feature. In addition Article 18 (Research) (2) of the Habitats Directive states: “Particular attention shall be paid to scientific work necessary for the implementation of Articles 4 and 10, and transboundary cooperative research between Member States shall be encouraged.” EU Member States are also to establish appropriate management plans specifically designed for the designated sites and integrated into other applicable development plans in coordinated manner.¹⁷⁸

Funding

The Directive also provides provisions on co-financing in Article 8 for sites of Community importance. In order to achieve financial support the Commission and the Member States must agree on a prioritized action framework of measures involving co-financing to be taken.

Monitoring and Review

Member States are empowered to establish a system of monitoring conservation measures and track incidental capture and killing of species listed in the Annex.¹⁷⁹ Last but not least, every six years, Member States shall draw up a report on the implementation of the measures taken under this Directive.¹⁸⁰

¹⁷⁷ Kettunen, M, Terry, A., Tucker, G. & Jones A. 2007. Guidance on the maintenance of landscape features of major importance for wild flora and fauna - Guidance on the implementation of Article 3 of the Birds Directive (79/409/EEC) and Article 10 of the Habitats Directive (92/43/EEC). Institute for European Environmental Policy (IEEP), Brussels, 114 pp. & Annexes, online: http://ec.europa.eu/environment/nature/ecosystems/docs/adaptation_fragmentation_guidelines.pdf.

¹⁷⁸ *Supra*, EU Habitat Directive, Art 6.

¹⁷⁹ *Supra*, Habitats Directive, Article 12(4).

¹⁸⁰ *Ibid*, Habitats Directive, Article 17 (1).

Implementation and Lessons Learned

The Habitats Directive and the Birds Directive are generally regarded as some of the most advanced and effective regional conservation instruments¹⁸¹. And with more than 26 000 sites and covering about 17.5% of the EU land territory, Natura 2000 is the largest network of protected areas in the world.¹⁸²

The assumption of many Member States, especially in north-western Europe, that their existing networks of protected areas would be sufficient for Natura 2000 proved to be wrong: All countries had to find additional sites for Natura 2000.¹⁸³ Thereby, the proportion of each country included into Natura 2000 varies from 7% (United Kingdom) to 36% (Slovenia)¹⁸⁴. Part of this variation is due to ecological differences with relatively few areas of nature conservation interest in urbanised and intensively farmed areas.¹⁸⁵

The Habitats and Birds Directives both also provide opportunities for providing NGO input into Natura 2000. Key opportunities and activities are in particular related to the following: Nominating sites, campaigning for corridors, evaluating site delineation, increasing site numbers, monitoring progress, improving management plans, proposing projects eligible for LIFE funding, Evaluating Natura 2000 species and habitats protection.¹⁸⁶ In particular, and in response to Article 4 of the Habitat Directive, the Commission, together with the Member States, and supported by the European Topic Centre on Biological Diversity (ETC/ BD) and its predecessors has developed the concept of bio-geographical seminars to examine the proposals and to identify gaps in the proposed network. At first, only NGOs with an interest in nature conservation were involved, with participation coordinated by the European Habitats Forum, but from 2002 onwards NGOs representing land owners and users also participated, coordinated by the European Landowners Organisation. The NGOs have played a major role in implementing Natura 2000.¹⁸⁷

The process of proposing sites and designating SACs initially proved to be slow and in disrespect of the timetable. As a result many of the EU Member States of the first decade of implementation were subject to legal proceedings in front of the European Court of Justice (ECJ) for failure to propose

¹⁸¹ A. Trouwborst, 'Conserving European Biodiversity in a Changing Climate: The Bern Convention, the EU Birds and Habitats Directives and the Adaptation of Nature to Climate Change', 20(1) Review of European Community and International Environmental Law, 2011, pp. 62-77. [Trouwborst]

¹⁸² *Supra*, Evans, pg. 13.

¹⁸³ *Ibid* Evans, pg. 19, 20.

¹⁸⁴ Slovenia joined the EU in 2004. At each enlargement the candidate countries have had the opportunity to add habitats and species to the annexes of both directives, and for species of the Habitats Directive to have exemptions: Evans, pg. 18; compare Markus Leibenath, Sandra Rientjes, et. al. (eds.), "Crossing Borders: Natura 2000 in the Light of EU Enlargement", Proceedings of an international workshop held in Dresden, May 7, 2004 (European Centre for Nature Conservation and Leibniz Institute of Ecological and Regional Development: 2004), online: http://www.ecnc.org/file_handler/documents/original/view/42/2005--crossing-borderspdf.pdf?PHPSESSID=b40bbbbe20b16de36e3f521d2df91c11; European Commission, Habitats Directive, http://ec.europa.eu/environment/nature/legislation/habitatsdirective/index_en.htm#enlargement (last updated 22/02/2012)).

¹⁸⁵ *Supra*, Evans, pg. 19, 20.

¹⁸⁶ Bird Life, media release: The EU continues to fail in financing successful and effective LIFE programmes (Brussels, 12 December 2011), online: http://www.birdlife.org/eu/pdfs/20111212-PRLIFE_FINAL2.pdf.

¹⁸⁷ *Supra*, Evans, pg. 15.

sites in time. In addition, several ECJ disputes elaborated on the process of designating SACs. Nevertheless, progress has been much faster than for the Birds Directive sites.¹⁸⁸

But despite these and others considerable difficulties, both scientific and political, the network is now close to complete on land – but not at sea: Only in 2005 and a judgement by the ECJ it was agreed that the two Directives apply to all waters where Member States exercise sovereignty. In the following the Commission established a marine working group in March 2003, which published guidelines on applying the Directives offshore in 2007. As previous assessments needed to be revisited a ‘Marine Reserve’ was introduced for habitat types and species thought to occur offshore and Member States were given more time to identify and propose sites. Although some countries have proposed significant areas, in general the marine component of the Natura 2000 network is far from complete.¹⁸⁹

In addition, designation of SCA’s is only one side of the coin. The other one – the implementation of effective conservation measures under the Directive – faces severe criticism. Firstly it should be noted that whereas the benefits of the Birds Directive have been demonstrated by Donald et al. (2007), who showed population increases of endangered species in response to conservation measures, there is to date no comparable study published on the Habitats Directive.¹⁹⁰ At the same time, the fact that under the Habitats Directive the choice of conservation measures is up to the Member States (even site management plans are not mandatory, but recommended) can be considered a severe shortcoming. And whereas in some countries their establishment has been made a requirement by national law, two recent publications concerning Greece and Romania suggest that the necessary administration is not in place in some countries.¹⁹¹

In that regard, the Commission, together with the Member States, NGOs and the ETC/BD, is planning a series of seminars, organised by bio-geographical regions, to discuss management of Natura 2000 sites. Meeting for the Boreal region were held in spring 2012, the Arctic region in winter 2012, and the Alpine region in autumn 2013.¹⁹² Further seminars are scheduled for the Mediterranean/Macaronesian regions and Continental/Pannonian/Steppic/Black Sea regions in Spring 2014 and 2015 respectively.¹⁹³

Another criticism is that Article 3 and Article 10 of the Habitats Directive are considered rather weak (“shall endeavour”) for the establishment of corridors and thus eventually the establishment of a European ecological network. Although some highlight, that in light of the favourable conservation status, connective measures can also be regarded as mandatory.¹⁹⁴

¹⁸⁸ *Ibid*, Evans; Dr. Gyula Bándi, “Biodiversity Loss Permitted? Redesignation and Declassification of Natura 2000 Sites”, Legal Analysis Summary, Justice and Environment 2011, online: http://www.justiceandenvironment.org/files/file/2011_natura_summary%281%29.pdf.

¹⁸⁹ *Ibid*, Evans, pg. 19, 21.

¹⁹⁰ *Ibid*, Evans, pg. 21.

¹⁹¹ *Ibid*, Evans, pg. 21.

¹⁹² EU, “The New Biogeographical Process, including Natura 2000 Seminars,” available at: http://ec.europa.eu/environment/nature/natura2000/seminars_en.htm; *Ibid*, Evans, pg. 22.

¹⁹³ *Ibid*, EU Natura 2000 Seminars.

¹⁹⁴ Van der Sluis, T., M. Bloemmen, I.M. Bouwma, “European corridors: Strategies for corridor development for target species” (ECNC, Tilburg, the Netherlands & Alterra: 2004), online: http://www2.alterra.wur.nl/webdocs/internet/corporate/prodpubl/boekjesbrochures/ecnc_compleet.pdf; compare also Carsten Kolbe-Weber, “Spatial connectivity of biotopes: A foundation of nature conservation”, pg. 43-49, in: Crossing Borders: Natura 2000 in the Light of EU Enlargement Proceedings of an international workshop held in

Last but not least and despite the increased effort and some good examples on financing Natura 2000 from the Community funds, the existing EU co-financing framework is considered inadequate, given the estimated need for resources.¹⁹⁵ But a clear benefit of work towards Natura 2000 has been increased scientific study of the habitats and species listed on the annexes including habitat mapping, in some cases of entire countries as in the Czech Republic and Spain. Future challenges include ensuring the network allows for adaptation to environmental change, including climatic change.¹⁹⁶

In summary, the Habitats Directive is despite the outlined shortcomings a regional instrument that has proved to be very successful in addressing the loss, fragmentation and degradation of all types of habitats across the EU territory. It can thus serve as a model for other supra-national bodies seeking to establish regional measures to achieve Target 5 of the Aichi Biodiversity Targets, which must also interact with subsidiary governments. At the same time, it may also serve as a model for a federal government with a legislative competence in cross-boundary environmental issues.

Dresden, May 7, 2004 (European Centre for Nature Conservation and Leibniz Institute of Ecological and Regional Development: 2005).

¹⁹⁵ M. Kettunen, O. Carter et. Al., “Assessment of the Natura 2000 Co-Financing Arrangements of the EU Financing Instrument” (March 2011) A project for the European Commission, Final Report, online: http://ec.europa.eu/environment/enveco/biodiversity/pdf/assessment_natura2000.pdf.

¹⁹⁶ Evans, pg. 22; compare also Trouwborst.



4.3 India, Biological Diversity Act of 2002

Background

Biological resources play an integral role in the socio-economic livelihood of commonalities globally, particularly those of rural and indigenous communities.¹⁹⁷ India is one of the mega biodiversity countries of the world. It ranks among the top ten species rich nations, possessing a documented 136,700 species of fauna and flora till date, having a high rate of endemic species, and being endowed with inland and marine bio resource, not to mention being the third largest producer of fish in the world.¹⁹⁸ However, over-exploitation and increasing unsustainable developmental activities have forced India to establish protective measures.¹⁹⁹ Various efforts have been taken by the international community to recognize the importance of biodiversity as well as providing safeguards against misuse of biological resources. India has aimed to embrace these obligations owing to the constitutional sanctity that these commitments have under the Indian Constitution.

India has implemented major initiatives to achieve the core objectives of the CBD including: the Biological Diversity Act, the National Wildlife Action Plan (NWAP) (2002-2016), the National Environment Policy (NEP) 2006, National Biodiversity Action Plan (NBAP), 2008 and National Action Plan on Climate Change (NAPCC), 2008.²⁰⁰

Analysis of Legislation

Background of the law

India developed the Biological Diversity Act,²⁰¹ passed in 2002, through an extensive and intensive consultation process initiated in 1994.²⁰² The Biological Diversity Rules,²⁰³ established in 2004, followed thereafter. An institutional mechanism has been created under BD Act and Rules by establishing National Biodiversity Authority, State Biodiversity Boards and Biodiversity Management Committees to take steps for creating database on biological resources and associated traditional knowledge through biodiversity registers and electronics data bases.

Objectives

India created the BD Act to achieve the objectives of CBD, with the primary focus of this Act to regulate access to biological resources and associated traditional knowledge (TK) so as to ensure equitable sharing of benefits arising out of their use, in accordance with the provision of Article 15

¹⁹⁷ CBD, 'History of the Convention' <<http://www.cbd.int/history/>> at 1 October 2013.

¹⁹⁸ MoEF, India's Fourth National Report to the Convention on Biological Diversity (2009) 1, available at: http://nbaindia.org/uploaded/Biodiversityindia/4th_report.pdf. [Fourth National Report to CBD]

¹⁹⁹ *Ibid*.

²⁰⁰ *Supra*, Fourth National Report to CBD.

²⁰¹ India, Biological Diversity Act (2002), available at: http://www.wipo.int/wipolex/en/text.jsp?file_id=185798. [BD Act]

²⁰² MoEF, India- Third National Report 138, available at http://nbaindia.org/uploaded/Biodiversityindia/3rd_report.pdf.

²⁰³ India, Biological Diversity Rules (2004) available at: http://www.wipo.int/wipolex/en/text.jsp?file_id=200357. [BD Rules]

of the CBD.²⁰⁴ The three core pillars on which the BD Act are based to promote conservation, sustainable use and access and benefit sharing arising from use of biological resources.

Principles

The BD Act refers to both ex-situ as well as in-situ conservation of biological resources.²⁰⁵ It is provided that access to the biological resources or the traditional knowledge associated with them would be restricted if such access is detrimental to these resources.²⁰⁶ The person or organization which undertakes such exploitation has to give a declaration that his activities shall not affect the resources adversely.²⁰⁷

In situ conservation is only possible with the help of local communities who live in the vicinity of such biodiversity rich regions. They not just conserve these resources but also depend on them making these communities equally responsible for sustainable use. One of the legal measures to elicit support from local communities is the formation of Biodiversity Management Committees (BMCs) which are constituted within the jurisdiction of a given local body.²⁰⁸ Though not specified within the BD Rules, certain state-specific BD Rules for example, the Arunachal Pradesh State Biodiversity Rules require the inclusion of local knowledgeable persons such as herbalists, agriculturist, Non Timber Forest Produce Collectors/traders, etc. within their BMCs.²⁰⁹ Another mode of *in situ* conservation can be undertaken by notifying areas of biodiversity importance as Biodiversity Heritage Sites.²¹⁰ Exemption to access is only available to local people and communities of the area, including growers and cultivators of biodiversity and folk healers, who have been practicing indigenous medicine.²¹¹

Other exemptions to access include those value added products²¹² which may contain portions/extracts of biological resources in unrecognizable and physically inseparable from which can be exported without the requirement of any certifications.²¹³ It would be interesting to note that the Ministry of Environment and Forests (MoEF) also released a list of biological resources²¹⁴ (NTC List) in consultation with the National Biodiversity Authority which are exempted from the provisions of the BD Act if these resources are normally traded as commodities.²¹⁵

²⁰⁴ CBD, Art 15 (7): “Each Contracting Party shall take legislative, administrative or policy measures, as appropriate, and in accordance with Articles 16 and 19 and, where necessary, through the financial mechanism established by Articles 20 and 21 with the aim of sharing in a fair and equitable way the results of research and development and the benefits arising from the commercial and other utilization of genetic resources with the Contracting Party providing such resources. Such sharing shall be upon mutually agreed terms.”

²⁰⁵ *Supra*, BD Act, sub-s 36(1).

²⁰⁶ *Ibid*, BD Rules r 16.

²⁰⁷ *Ibid*, BD Rules r 14, see in conjunction with Form 1.

²⁰⁸ *Supra*, BD Act, sub-s 41(1) read with BD Rules r 22.

²⁰⁹ Arunachal Pradesh State Biodiversity Rules r 23.

²¹⁰ *Supra*, BD Act, sub-s 37 (1).

²¹¹ *Ibid*, BD Act, proviso to s 7.

²¹² *Ibid*, BD Act, sub-s 2 (c) read with sub-s 2 (p).

²¹³ Ritwick Dutta and Pushp Jain, ‘CITES Listed medicinal plants of India: An Identification Manual, Traffic India’ WWF 2000.

²¹⁴ MoEF Notification dated 26.10.2009 [S.O.2726(E)], available at <http://nbaindia.org/uploaded/pdf/notification/5 NTC.pdf>.

²¹⁵ *Supra*, BD Act, s 40.

Institutions Arrangements

Competent National Authority

The National Biodiversity Authority is established as the competent national authority,²¹⁶ with powers of policy advisory and designation and management of heritage sites.²¹⁷ State Biodiversity Boards are also established to function as advisory, administrative and approval bodies governing access to biodiversity under their respective jurisdiction.²¹⁸

Biodiversity Management Committees (BMC)

India developed Biodiversity Management Committees (BMC) as local coordination and management bodies aimed at promoting and supporting sustainable use and documentation of biodiversity, and associated cultural practices and traditional knowledge.²¹⁹ Seven members are nominated to sit on the BMC, with not less than one third of members being women, and not less than 18% being members of the Scheduled Castes/Scheduled Tribes.²²⁰ The main function of the BMC is to facilitate, among key stakeholders, the collection of information pertaining to traditional knowledge relating to genetic resources in the region for the People's Biodiversity Register, and to provide an advisory role on matters referred to it by the State Biodiversity Authority.²²¹ BMCs in the State of Arunachal Pradesh designate that members should also include local knowledgeable persons such as herbalists, agriculturalists, Non Timber Forest Produce Collectors/traders and academics.²²²

People's Biodiversity Registers (PBRs)

Local communities must be given special regard within an ABS regime since they have been caretakers of such resources for time immemorial along with possessing an understanding in the form of knowledge about these resources.²²³ India empowers local Biodiversity Management Committees (BMCs) to initiate and document available biological diversity including preservation practices, cultivation and breeding, and chronicling related knowledge using registers and electronic databases.²²⁴ BMCs collaborate with State and National biodiversity bodies²²⁵ to establish a People's Biodiversity Registers (PBRs) as a system of comprehensive information on availability and associated knowledge relating to the traditional uses of biological resources.²²⁶ National and State bodies must leverage these registers when reviewing decisions related to access to ensure that prior informed consent (PIC) of the local communities is obtained before commercial utilization of these resources.²²⁷ At present, PBRs are being developed in fourteen States across the country,²²⁸ with specialized guidelines established, and a Technical Support Group to providing expert

²¹⁶ *Ibid*, BD Act, s 8

²¹⁷ *Ibid*, BD Act, s 18.

²¹⁸ *Ibid*, BD Act, s 22-23.

²¹⁹ India, Biological Diversity Act (2002), sub-s 41(1), available at:

http://www.wipo.int/wipolex/en/text.jsp?file_id=185798 [BD Act]; India, Biological Diversity Rules (2004), sub r 22, available at: http://www.wipo.int/wipolex/en/text.jsp?file_id=200357. [BD Rules]

²²⁰ *Ibid*, BD Rules r 22(2).

²²¹ *Ibid*, BD Rules r 22(6-7).

²²² India, Arunachal Pradesh State Biodiversity Rules r 23, available at:

http://nbaindia.org/uploaded/pdf/notification/Arunachal_pradesh_Rules.pdf.

²²³ T. Ravishanker, 'Traditional Knowledge and Conservation of Biodiversity for Sustainable Livelihoods by Tribal Communities in South India', available at <http://www.fao.org/docrep/article/wfc/xii/0613-b1.htm>.

²²⁴ *Supra*, BD Act, s 41.

²²⁵ *Supra*, BD Rules, sub-r 22 (9).

²²⁶ *Ibid*, BD Rules, sub-r 22 (6).

²²⁷ *Supra*, BD Act, s 41(2-3); *Ibid*, BD Rules, sub-r 22 (11).

²²⁸ National Biodiversity Authority of India, Peoples Biodiversity Register (2014), available at: <http://nbaindia.org/content/105/30/2/pbr.html>.

guidance.²²⁹ The access to these registers would only be available to outsiders with consent of the BMCs thus ensuring the prior and informed consent condition.²³⁰

At present, the preparation of these PBRs has been undertaken in a few states like Kerala, Karnataka, Madhya Pradesh, Andhra Pradesh, Jharkhand, Uttarakhand, Arunachal Pradesh, Gujarat, Himachal Pradesh, Manipur, Mizoram, Tripura, Uttar Pradesh and West Bengal.²³¹

Legal and Policy Instruments/Context

Access and Benefit Sharing

Access and benefit sharing regime intends to recognize the role of ILCs in the conservation of biological resources. Drawing inspiration from the CBD, the BD Act also incorporates this concept in detail with inclusion of terms such as “benefit claimers,”²³² “commercial utilization”, “fair and equitable benefit sharing.”²³³

The Act stipulates that no person, who is a citizen of India or a body corporate, association or organization which is registered in India, shall obtain any biological resource for commercial utilization, or bio-survey and bio-utilization for commercial utilization except after giving prior information to the State Biodiversity Board concerned.²³⁴ The mechanism of benefit sharing within the Act provides for mandatory prior approval of the National Biodiversity Authority (NBA) for obtaining any biological resources occurring in India or associated knowledge for commercial or any other use.²³⁵ However exemption has been provided to collaborative research through government sponsored or government approved institutions subject to overall guidelines and approval of the Central Government.²³⁶

Prior approval of NBA is also required before applying for any Intellectual property rights in or outside India for any invention based on research or information on a biological resource obtained from India as it may take measures to oppose the grant of such intellectual property rights in any country outside India.²³⁷

Access must be based on mutually agreed terms established between persons applying for such approval, local bodies concerned and the benefit claimers and the formula for such benefit sharing shall be determined on a case-to-case basis.²³⁸ The conditions of benefit sharing may entail either granting of individual as well as community intellectual property rights to benefit claimers or the NBA where benefit claimers cannot be identified, or other options such as technology transfer, product development, education and awareness raising activities, institutional capacity building or even venture capital fund.²³⁹ Where the benefit claimers cannot be identified, monetary compensation if any would be deposited in the National Biodiversity Fund created for this

²²⁹ National Biodiversity Authority of India, Peoples Biodiversity Register: Revised PBR Guidelines (2013), at 4, available at: <http://nbaindia.org/uploaded/pdf/PBR Format 2013.pdf>

²³⁰ *Ibid.*

²³¹ NBA, ‘People’s Biodiversity Register’ available at <http://nbaindia.org/content/105/30/2/pbr.html>.

²³² *Ibid*, BD Act, sub-s 2 (a): “benefit claimers” means the conservers of biological resources, their byproducts, creators and holders of knowledge and information relating to the use of such biological resources, innovations and practices associated with such use and application.

²³³ *Ibid*, BD Act, sub-s 2(g) read with s 21.

²³⁴ *Ibid*, BD Act s 7.

²³⁵ *Ibid*, BD Act, s 3.

²³⁶ *Ibid*, BD Act, s 5.

²³⁷ *Ibid*, BD Act, s 6 read with sub-s 18 (4).

²³⁸ *Ibid*, BD Act, sub-s 21 (1) read with BD Rules sub-r 20 (3).

²³⁹ *Ibid*, BD Act, sub-s 21 (2) read with BD Rules r 20.

purpose.²⁴⁰ It is therefore important that any tripartite agreement that is entered upon by the third party, the BD Authority and the local community must satisfy the true ingredients of the Contract Act, 1872.

While the formula for quantum of benefit sharing can only be decided on a case by case basis, it will be done so after consultation with local bodies and benefit claimers and following certain parameters such as access, extent of use, sustainability aspect, impact and expected outcome levels and including measures ensuring conservation and sustainable use of biological diversity.²⁴¹

Funding

A Local Biodiversity Fund is established which may receive funds by way of grant or loan from the State government, the National Biodiversity Authority, the State Biodiversity Board or through fees received by the Biodiversity Management Committee.²⁴² Funds collected are to be used for the conservation and promotion of sustainable use of biodiversity in the region,²⁴³ with an annual report required outlining account details and activates achieved annually.²⁴⁴

Sanctions and penalties

Contravening acts are punishable by a term of imprisonment not exceeding five years and a fine of up to ten lakh rupees. In cases where the damage of the contravening act exceeds ten lakh rupees, the fine imposed shall be commensurate with the damage caused.²⁴⁵ Acts in violation of directions given by the national or state biodiversity boards shall be punishable by a fine not exceeding one lakh rupee, with second, subsequent and continuous violations punishable by additional fines which may extend to two lakh rupees for each day in which the party remains in default.²⁴⁶ Where the offense is conducted by a corporate entity, both the company and all controlling members/directors shall be deemed guilty, held without bail, and severally liable unless evidence can be demonstrated illustrating the act was done without their knowledge and that due diligence was exercised.²⁴⁷

Monitoring and Review

Strategies and policies for monitoring of biodiversity rich areas, the promotion of both *in situ* and *ex situ* conservation, research, training and public awareness must be developed at the national level.²⁴⁸ Where there is reason to believe that biodiversity is not being used in a sustainable manner, immediate ameliorative measures are to be established in coordination with State bodies.²⁴⁹ Also all BMCs are to submit an annual report giving full account of the activities undertaken and an audited report of all accounts.²⁵⁰

²⁴⁰ *Ibid*, BD Act, sub-s 21 (3), read with BD Rules sub-r 20 (8).

²⁴¹ *Supra*, BD Rules, sub-r 20 (5).

²⁴² *Supra*, BD Act, s 42-42.

²⁴³ *Ibid*, BD Act, s 44(2).

²⁴⁴ *Ibid*, BD Act, s 45-46.

²⁴⁵ *Ibid*, BD Act, s 55.

²⁴⁶ *Ibid*, BD Act, s 56.

²⁴⁷ *Ibid*, BD Act, s 57-58.

²⁴⁸ *Ibid*, BD Act, s 36(1).

²⁴⁹ *Ibid*, BD Act, s 36(2).

²⁵⁰ *Ibid*, BD Act, s 45-47.

Implementation and Lessons Learned

Preparation of PBRs

The preparation of PBRs is an innovative feature of the BD Act ensuring the documentation of a large variety of data on biological resources which were not documented previously. As this process has been kick-started in a few states, two fold benefits have been derived. Firstly, the dying collection of undocumented traditional knowledge can be saved and secondly, this recorded knowledge can be prevented from being mis-utilized ensuring that local communities receive their dues provided that the process of documentation starts at the earliest.

Awareness building at the primary level

The BD Act provides for various roles and responsibilities of the government amongst which training and public education to increase awareness with respect to biodiversity is important.²⁵¹ Awareness building on biodiversity is a crucial factor towards communities conserving and sustainably using biological resources found around them.

Pro-activeness by the State Biodiversity Boards and BMCs

A few State Biodiversity Boards and BMCs in India are starting to stand up against the might of the industries by imposing a benefit-sharing levy for the use of biological resources in their production activities.²⁵² With the companies objecting to such a strict interpretation of the term, this matter is still being resolved at the judicial level. However, it has given communities, a sense of ownership of the natural resources. Another example of pro-activeness is the filing of a bio-piracy case by NBA and the Karnataka State Biodiversity Board for misappropriating endemic varieties of brinjal in order to create BT Brinjal which would be the first such instance in this country.²⁵³

Declaration of Biodiversity Heritage Sites and Species facing Extinction

In situ conservation of rare, endangered and threatened species of biological resources maybe helped by the process of declaring regions they are found in as BHS. Several regions around the country are being declared as BHS²⁵⁴ and plenty of states have also released a list of species of plants and animals which are on the verge of extinction.²⁵⁵ This would help in identifying further sites for protection and stepping up the management of these sites.

Remaining Challenges

Clarification on the Synergy with other environmental laws

Further clarification is needed on the complementarity and synergistic application of the BD Act in relation to other domestic legislation. Currently, the BD Act only has a complementary status with respect to other laws pertaining to forests, wildlife, panchayati raj institutions (on local self-governance), PPVFR and patents. For example, while the BD Act gives the NBA the power to refuse the patenting of an invention that uses a biological resource, the Patents Act does not explicitly recognize this power. It is not clear whether the NBA's refusal would over-ride the patent office's approval or whether the NBA's refusal could be grounds for challenging a patent. Further,

²⁵¹ *Ibid*, BD Act, sub-s 36 (1).

²⁵² LathaJishnu, "Village throws a googly" (2013) *Down To Earth*, available at: <http://www.downtoearth.org.in/content/village-throws-googly>; Notice issued by Madhya Pradesh State Biodiversity Board available at <http://www.mpsbb.info/ImportantNotice.aspx#>.

²⁵³ S. Shyam Prasad, 'Bt Brinjal: HC says Monsanto will have to face bio-piracy case', available at: <http://www.bangaloremirror.com/bangalore/cover-story/Bt-Brinjal-HC-says-Monsanto-will-have-to-face-bio-piracy-case/articleshow/24303637.cms>

²⁵⁴ NBA, 'Biodiversity Heritage Sites', available at <http://nbaindia.org/content/106/29/1/bhs.html>.

²⁵⁵ NBA, 'Notifications', available at <http://nbaindia.org/content/18/21/1/notifications.html>.

while the BD Act stipulates for the taking of prior informed consent of the local bodies, the Patents Act has not recognized any such need within its provisions. The concept of benefit sharing has also not been highlighted within the Patents Act, in the event where the invention inevitably makes use of a biological resource over which the communities have a right of ownership. Conflicts with the legislations need to be resolved before BD Act can achieve the goals it set out to do so.

Delay in implementation

It has also been noted that the BMCs mentioned under the BD Act are yet to be constituted in several states, delaying the process of local level biodiversity conservation and the PBRs meant to record knowledge on locally available medicinal herbs have been prepared in very few states. Another problem is that there is no legal protection given to the information recorded in the PBRs. Neither the local communities nor the SBB or the NBA have the procedure laid down to ensure protection of the Registers against theft and misuse. Powers of the BMCs must also be increased so as to include penal powers, in case of violation of the provisions given within the Act and Rules. This step would lead to better involvement of the local bodies in protection of the biological resources in their vicinity. Due to lack of proper implementation of the BD Act, massive funds that could have been collected from the industry²⁵⁶ and channelized for conservation of biodiversity in India could not be collected, with the NBA having not managed to regulate even a single foreign company.

Loopholes in the policy of exemption

The exception of certain biological resources including medicinal plants, spices and horticultural crops listed as Nationally Traded Commodities list from the application of the provisions of the BD Act by the Central ministry,²⁵⁷ may tend to have undesired effects on the conservation regime and in response, the MoEF has clarified that this list is only with respect to export regulations and that prior permission of the NBA would not be required in these cases. However, if these resources are used for research or industrial purposes within the country, such permission is mandatory. This clarification still does not assuage the concern of rare, endangered and threatened species of biological resources being exported out of the country without any regulations.

Another concern is the exemption of ‘value added products’²⁵⁸ from the application of this Act which may contain portions or extracts of plants and animals in unrecognizable and physically inseparable form. This would imply that herbal medicine or any finished plant or animal product, where the label does not mention any ingredients extracted from these plants or animals shall be freely exportable without requirement of any certification from any authorities whatsoever and this gives rise to ambiguity.

Creating an ADR forum for resolving disputes on ABS and TK

In practical implementation of the ABS regime there would be disputes and therefore a less formal mechanism should be put in place which may involve principles of ADR mechanisms along with traditional and customary modes of dispute resolution as a first adjudicating body. Such a forum may constitute traditional heads of clans/tribes or any other local body along with independent experts appointed by the State Biodiversity Board.

²⁵⁶*Supra*, BD Act s 3.

²⁵⁷*Supra*, BD Act, Sec 40: See Biological Resources notified as normally traded commodities, available at http://nbaindia.org/uploaded/pdf/notification/5_NTC.pdf.

²⁵⁸*Ibid*, BD Act sub-s 2 (c) read with sub-s 2 (p).

Common property arrangements

The Act recognizes rights over biological resources either in the hands of the state or in the hands of private inventors through intellectual property rights. It does not, however, provide a framework for the rights of all other holders of biological resources and related knowledge. The consequence is that resources and knowledge that are not allocated to private entities through intellectual property rights or claimed by the state itself will be deemed to be in the public domain.²⁵⁹ While this position is continuously evolving with rights of tribal communities being recognized under the several legislations mentioned above, rights of an individual over the natural resources surrounding him is constantly challenged.

²⁵⁹ P C Sutar and N Swain, 'Implementation of Biological Diversity Act in India: An Overview with Case Studies' Regional Center for Development Corporation 24 August 2011 [20], http://www.rcdcindia.org/PbDocument/81a3eb27083118c-0e2b-4105-948f-344a088c47e3RCDC_Implementation_of_Biological_Diversity_Act_in_India.pdf.



4.4 Japan, Basic Act on Biodiversity (Act No. 91 of 1993)

Background

Nature conservation is a government priority in Japan and it is one of the three pillars of its Sustainable Society Concept launched in 2007.²⁶⁰ One recent example of this commitment is the Japan Ministry of the Environment and the United Nations University Institute of Advanced Studies (UNU-IAS) jointly started the Satoyama Initiative, which promotes and conserves bio-cultural landscapes that have been shaped over the years by the interaction of people and with nature. The vision underlying the initiative is one of societies living in harmony with nature, made up of human communities where the maintenance and development of socio-economic activities (including agriculture and forestry) align with natural processes. *Satoyama* is driven by recognition that by managing and using biological resources sustainably and properly maintaining biodiversity, humans will enjoy a stable supply of various natural benefits well into the future. The initiative further aims to use both social and scientific disciplines to study how relationships between humans and nature should function in ‘socio-ecological production landscapes’ (SEPL).²⁶¹

Impacts to biodiversity in Japan are primarily caused by human-related drivers.²⁶² In turn, Japan has been promoting initiatives geared towards the implementation of the Strategic Plan for the National Biodiversity (2011-2020) in support of the achievement of the Aichi Biodiversity Targets.²⁶³ It is important that further understanding and action is taken to address biodiversity loss, cooperation is established among various stakeholders to establish momentum for conservation and sustainable use, recognition is established of the socio-ecological shares that are overly connected to production and distribution of energy and goods, and enhancement of scientific knowledge to address ongoing biodiversity loss.²⁶⁴

Analysis of Legislation

Background of the Law

Japan’s Basic Act on Biodiversity,²⁶⁵ enacted in 1993, aimed to clarify the fundamental principles for the conservation and sustainable use of biodiversity, as well as the responsibilities of the national government, local governments, businesses, citizens, and other private bodies. It is intended to guide the review of existing laws, and serve as a basis for future policies for the development of a society

²⁶⁰ This country study is based on Freedom-Kai Phillips, *Target 2: Japan Basic Act on Biodiversity*, 2008, <http://www.cisdl.org/aichilex/Target2-Japan2008> and Kathrine Lofts and Freedom-Kai Phillips, *Target 17: Japan Basic Act on Biodiversity*, 2008, <http://www.cisdl.org/aichilex/Target17-Japan2008>.

²⁶¹ For more information, see the *Satoyama* Initiative Website at <http://satoyama-initiative.org>.

²⁶² Japan, “Fifth Report to the Convention on Biological Diversity” (March 2014), at 21, available at <http://www.cbd.int/doc/world/jp/jp-nr-05-en.pdf>. [5th Report to CBD]

²⁶³ *Ibid*, 5th Report to CBD, at 91.

²⁶⁴ *Ibid*, 5th Report to CBD, at 91-93.

²⁶⁵ Basic Environment Law (Act No. 91 of 1993), available: <http://www.env.go.jp/en/laws/policy/basic/index.html> [Basic Environment Law]

in harmony with nature. The Act requires the national government to formulate a National Biodiversity Strategy (NBS), in consultation with civil society through the Central Environmental Council, which includes basic principles and targets; comprehensive policies to be implemented by the government; as well as all other necessary matters for the promotion of the conservation and sustainable use of biodiversity. Further, prefectures and municipalities are encouraged to formulate regional biodiversity strategies to respond to the unique environmental conditions of each localized ecosystem. By reviewing the NBS iteratively and consistently working to incorporate successful practices from the prefectural/municipal levels into the national strategy, the Government of Japan has set in place an effective, highly participatory, and continually refined strategic environmental planning framework.

Objective

The Government of Japan has over 15 years of experience in developing national strategies on biodiversity. Japan became a signatory to the Convention on Biological Diversity in 1993 and adopted its first National Biodiversity Strategy in 1995. That strategy was reviewed twice, in 2002 and 2007. By then, the conservation of nature had evolved into a governmental priority in Japan, identified as one of the three pillars of its 2007 Sustainable Society Strategy, which called for the conservation of biodiversity and a re-orientation of socio-economic activities in harmony with nature.²⁶⁶

It is in this context that the government adopted the Basic Act on Biodiversity in 2008. In line with the principles of the country's Basic Environment Law (Act No.91 of 1993),²⁶⁷ the Basic Act on Biodiversity aimed to clarify the fundamental principles for the conservation and sustainable use of biodiversity, and guide the development of related policies in a comprehensive, coordinated and participatory manner. Notably, the Act requires the national government to formulate a National Biodiversity Strategy, and encourages the development of regional biodiversity strategies at the prefectural and municipal levels.

The objectives of the law include: the conservation of regional biodiversity; the conservation of diversity of wildlife species; the prevention of damage by alien species; the promotion of appropriate use of national land and natural resources; the promotion of rational use of biological resources; the promotion of biodiversity-friendly business activities; the promotion of policies that contribute to prevention of global warming; coordination and cooperation among diversified actors and promotion of voluntary activities; promotion of survey; promotion of science and technology; improvement of public understanding; promotion of Environment Impact Assessment, pertaining to biodiversity at the stage of planning business plans; and ensuring international coordination and promotion of international cooperation.²⁶⁸

Principles

The prime objective of the Act is to build upon the Basic Environment Law, in a comprehensive and participatory fashion, to establish fundamental principles for national, regional and local strategic sustainability and biodiversity planning.²⁶⁹ The fundamental principles are that: (1)

²⁶⁶ Government of Japan, "Becoming a Leading Environmental Nation in the 21st Century: Japan's Strategy for a Sustainable Society," available: www.env.go.jp/en/focus/attach/070606-b.pdf

²⁶⁷ Japan, Basic Environment Law Act No. 91 (1993), available at: <http://www.env.go.jp/en/laws/policy/basic/>. [Basic Environment Law]

²⁶⁸ *Ibid*, Basic Environment Law, at Art 3; Basic Act on Biodiversity, Art 1.

²⁶⁹ Government of Japan, Act. No. 58 of 2008 (Basic Act on Biodiversity), 6 June 2008 available: <http://faolex.fao.org/docs/texts/jap100101.doc> [Basic Act on Biodiversity] at Art. 1.

conservation of biodiversity shall be done with respect to unique conditions of regional environment;²⁷⁰ (2) use of biodiversity shall be done in a sustainable and minimally impactful manner;²⁷¹ (3) conservation and sustainable use of biodiversity shall be guided by scientific evaluation and continually refined based on these evaluations;²⁷² (4) conservation of biodiversity is aimed at regeneration of ecosystems, done from a long-term perspective;²⁷³ and, (5) conservation efforts shall be done recognizing the impact of global warming on biodiversity, and the preventative role biodiversity conservation plays.²⁷⁴

A National Biodiversity Strategy is established to promote conservation and sustainable use of biodiversity,²⁷⁵ which addresses: (1) basic policy principles for conservation and sustainable use of biodiversity;²⁷⁶ (2) suitable biodiversity conservation targets;²⁷⁷ (3) comprehensive conservation and sustainability strategic policy planning;²⁷⁸ and, (4) other additional policies as needed to promote conservation and sustainable use of biodiversity.²⁷⁹ The Minister of the Environment is tasked with developing a draft strategy,²⁸⁰ which incorporates opinions of civil society as represented by the Central Environmental Council,²⁸¹ for submission to cabinet. Finally, an annual review is conducted and submitted to the Diet which outlines *the current state of* biodiversity policies,²⁸² and identifies policy areas of focus for the subsequent year for further strategic planning.²⁸³

The NBS is developed based on the principles of comprehensiveness and systematic promotion of environmental conservation as enumerated in the Basic Environment Law of 1993,²⁸⁴ and is the guiding policy document for all strategic planning on sustainability and conservation of biodiversity.²⁸⁵ Regionally, prefectures and municipalities are encouraged to independently or jointly establish a regional biodiversity strategy based on the unique conditions and constraints of that region. Following the development of a regional strategy, prefectures and municipalities must send the strategy to the Minister of the Environment.²⁸⁶

Institutional Arrangements

A National Biodiversity Strategy is established to promote conservation and sustainable use of biodiversity,²⁸⁷ which addresses: (1) basic policy principles for conservation and sustainable use of biodiversity;²⁸⁸ (2) suitable biodiversity conservation targets;²⁸⁹ (3) comprehensive conservation and

²⁷⁰ *Ibid*, Basic Act on Biodiversity, Art. 3(1).

²⁷¹ *Ibid*, Basic Act on Biodiversity, Art. 3(2).

²⁷² *Ibid*, Basic Act on Biodiversity, Art. 3(3).

²⁷³ *Ibid*, Basic Act on Biodiversity, Art. 3(4).

²⁷⁴ *Ibid*, Basic Act on Biodiversity, Art. 3(5).

²⁷⁵ *Ibid*, Basic Act on Biodiversity, Art. 11(1).

²⁷⁶ *Ibid*, Basic Act on Biodiversity, Art. 11(2)(i).

²⁷⁷ *Ibid*, Basic Act on Biodiversity, Art. 11(2)(ii).

²⁷⁸ *Ibid*, Basic Act on Biodiversity, Art. 11(2)(iii).

²⁷⁹ *Ibid*, Basic Act on Biodiversity, Art. 11(2)(iv).

²⁸⁰ *Ibid*, Basic Act on Biodiversity, Art. 11(3).

²⁸¹ *Ibid*, Basic Act on Biodiversity, Art. 11(4); Basic Environment Law 1993, Art. 41.

²⁸² *Ibid*, Basic Act on Biodiversity, Art. 10(1).

²⁸³ *Ibid*, Basic Act on Biodiversity, Art. 10(2).

²⁸⁴ *Supra*, Basic Environment Law 1993, Art. 15.

²⁸⁵ *Supra*, Basic Act on Biodiversity, Art. 12 (2).

²⁸⁶ *Ibid*, Basic Act on Biodiversity, Art. 13(3).

²⁸⁷ *Ibid*, Basic Act on Biodiversity, Art. 11(1).

²⁸⁸ *Ibid*, Basic Act on Biodiversity, Art. 11(2)(i).

²⁸⁹ *Ibid*, Basic Act on Biodiversity, Art. 11(2)(ii).

sustainability strategic policy planning;²⁹⁰ and, (4) other additional policies as needed to promote conservation and sustainable use of biodiversity.²⁹¹ The Minister of the Environment is tasked with developing a draft strategy,²⁹² which incorporates opinions of civil society as represented by the Central Environmental Council,²⁹³ for submission to cabinet. Finally, an annual review is conducted and submitted to the Diet which outlines *the current state of* biodiversity policies,²⁹⁴ and identifies policy areas of focus for the subsequent year for further strategic planning.²⁹⁵

The NBS is developed based on the principles of comprehensiveness and systematic promotion of environmental conservation as enumerated in the Basic Environment Law of 1993,²⁹⁶ and is the guiding policy document for all strategic planning on sustainability and conservation of biodiversity.²⁹⁷ Regionally, prefectures and municipalities are encouraged to independently or jointly establish a regional biodiversity strategy based on the unique conditions and constraints of that region. Following the development of a regional strategy, prefectures and municipalities must send the strategy to the Minister of the Environment.²⁹⁸ The National Biodiversity Strategy of Japan was first adopted in 1995, and was reviewed twice in 2002 and 2007. The requirement for a new policy led cabinet to adopt a very ambitious Biodiversity Strategy 2010,²⁹⁹ as part of a 100 year centennial plan, as well as mid- and short-term targets (2020 and 2050) and priority issues to be addressed by around 2010.

Legal and Policy Instruments/Content

Public Participation

The Act takes a broad approach to stakeholder engagement, providing responsibilities for various groups. National ministries are generally responsible for formulation and implementation of biodiversity conservation and sustainability efforts.³⁰⁰ Local governments hold responsibility for refining national measures for local application with respect to the unique natural and social make-up of the area.³⁰¹ Enterprises are encouraged to reduce their impact on biodiversity and develop and incorporate biodiversity-friendly measures into their normal course of business.³⁰² Civil society shall endeavour to reduce their impact on biodiversity by handling alien species appropriately, aiming to choose biodiversity friendly goods and services,³⁰³ and cooperating with others to incorporate conservation measures into their daily life.³⁰⁴

Environmental Impact Assessments

Impacts to the environment are to be taken into consideration via the use of an Environmental Impact Assessment (EIA). As biodiversity is based upon maintaining a subtle balance, due

²⁹⁰ *Ibid*, Basic Act on Biodiversity, Art. 11(2)(iii).

²⁹¹ *Ibid*, Basic Act on Biodiversity, Art. 11(2)(iv).

²⁹² *Ibid*, Basic Act on Biodiversity, Art. 11(3).

²⁹³ *Ibid*, Basic Act on Biodiversity, Art. 11(4); Basic Environment Law 1993 at Art. 41.

²⁹⁴ *Ibid*, Basic Act on Biodiversity, Art. 10(1).

²⁹⁵ *Ibid*, Basic Act on Biodiversity, Art. 10(2).

²⁹⁶ *Supra*, Basic Environment Law 1993, Art. 15.

²⁹⁷ *Supra*, Basic Act on Biodiversity, Art. 12 (2).

²⁹⁸ *Ibid*, Basic Act on Biodiversity, Art. 13(3).

²⁹⁹ Japan, “Cabinet Decision on the 4th National Biodiversity Strategy of Japan”, 30 April 2010, Ministry of the Environment, Government of Japan, available at: <http://www.env.go.jp/en/focus/100430.html>.

³⁰⁰ *Supra*, Basic Act on Biodiversity, Art. 4.

³⁰¹ *Ibid*, Basic Act on Biodiversity, Art. 5.

³⁰² *Ibid*, Basic Act on Biodiversity, Art. 6.

³⁰³ *Ibid*, Basic Act on Biodiversity, Art. 7(1).

³⁰⁴ *Ibid*, Basic Act on Biodiversity, Art. 7(2).

consideration must be placed on the assessing and mitigating impacts on biodiversity at the early stages of implementation of business activities that have an adverse effects. Assessment of potential impacts is to consider the characteristics of the business at various stages of implementation.³⁰⁵

Monitoring/follow up and review

The state of biodiversity is based on an adaptive model which evolves through a process of ongoing monitoring using scientific evaluations to reflect on the business impact on biodiversity.³⁰⁶

Analysis and lessons learned

Successes

Japan's Basic Act on Biodiversity provides for an effective and frequently reviewed strategic planning mechanism. Beyond annual progress reporting and refinement, the NBS benefits from the experience and incorporation of prefectural and municipal strategic plans. In 2002, Japan refined their monitoring process to incorporate quarterly review cycles.³⁰⁷ This pre-existing institutional experience has allowed Japan to produce five versions of their NBS, with the most recent version set for revision in 2015 based on the midterm review results on the Aichi Targets.³⁰⁸ By leveraging a continuous refinement model based on national, prefectural and municipal knowledge transfer, Japan has developed a highly responsive strategic environmental planning model.

In 2010, in accordance with the Basic Act on Biodiversity, cabinet adopted the fourth NBS. The Strategy established an ambitious long-term perspective on biodiversity conservation and sustainable use with its 100 year "Centennial" plan, in addition to adopting short- and mid-term targets (for 2020 and 2050, respectively).³⁰⁹ By adopting a long-term perspective in their strategic environmental planning but focusing attention on short-term implementation and review, Japan has been able to establish an effective interplay between long-term conservation goals and short-term planning and implementation. This approach has allowed for enhanced knowledge transfer between national, prefectural and local governments and environment councils, and iterative refinements to strategies at all levels based on exemplars.

Another notable success is the highly participatory nature of the strategic planning and prioritization initiatives. Beyond enumerating the various responsibilities of civil society, Japan's Basic Act on Biodiversity also leverages the pre-existing Central Environmental Council (nationally, regional, and locally) as a conduit for stakeholder communication, debate and consultation.³¹⁰ The Central Environmental Council is comprised of a cross-section of civil society (media, academia, NGO/Citizens, business, relevant agencies/ministries, media, and local government) having expertise with regard to environmental conservation.³¹¹ Similarly, prefectures and municipalities implement environmental councils to localize the debate. Taken in concert, the multiple tiers of engagement with civil society illustrate Japan's dedication to public participation in biodiversity conservation planning.

³⁰⁵ *Ibid*, Basic Act on Biodiversity, Art. 25.

³⁰⁶ *Ibid*, Basic Act on Biodiversity, Art. 3(3).

³⁰⁷ Convention on Biological Diversity, *Action for Biodiversity: Towards a society in harmony with nature* (CBD Secretariat: Montreal, Canada, 2010) at 38.

³⁰⁸ Japan, *The National Biodiversity Strategy of Japan (2012-2020): Roadmap towards the Establishment of an Enriching Society in Harmony with Nature* (Ministry of the Environment: Government of Japan, 09-28-2012) at 125. [NBSAP 2012]

³⁰⁹ Japan, *The National Biodiversity Strategy of Japan 2010: Biodiversity is life, Biodiversity is our life* (Ministry of the Environment: Government of Japan, 2010) at 5. [NBSAP 2010]

³¹⁰ *Supra*, Basic Environment Law 1993 at Art. 41.

³¹¹ *Ibid*, Basic Environment Law 1993, Art. 42.

Remaining challenges

The primary challenge facing the Diet is completing the activities needed to meet the ambitious biodiversity goals set in the allotted timeline – by 2020 and 2050 respectively. As of February 2012, 15 prefectures and 11 municipalities had completed the development of Local Biodiversity Strategies, with 27 other prefectures and 26 municipalities in the development process.³¹² The fifth iteration of Japan's NBS which was approved by cabinet following COP 10,³¹³ builds on the approximately 720 measures and 35 numerical targets outlined in 2010 in light of the Aichi Targets and the Great East Japan Earthquake.³¹⁴

Providing increased support for regional measures and planning is essential to increasing channels of communication and civil engagement. A lack of understanding of biodiversity, and the impact humans have on ecosystem integrity, was noted as a key challenge in 2009 following a Cabinet Office survey which highlighted that only 13% of citizens knew the meaning of biodiversity, and only 36% had heard of biodiversity.³¹⁵ While inroads have been made on raising public awareness (the same survey administered in 2012 showed an increase to 19% and 56% respectively), mainstreaming biodiversity into the daily lives of Japanese citizens remains difficult.³¹⁶ Focus remains on developing and implementing national and regional campaigns to increase understanding of biodiversity through first-hand experiences, promotion of a biodiversity-conscious social system and lifestyles.

Effectively identifying and introducing exemplary components, characteristics and experiences of each regional strategy also slows Japan in realizing their Centennial Plan. While significant progress in biodiversity conservation has been realized in many areas, developments are based on loosely coordinated individual efforts rather than a harmonized collection of initiatives.³¹⁷ The promotion of cross-sectorial and inter-regional initiatives will increase cooperation and collaboration among participating organizations. Further, by focusing on establishing sound educational frameworks at the elementary, secondary, and post-secondary levels which promote biodiversity conservation, human-natural capital constraints which are currently being experienced can be alleviated.³¹⁸

The *Basic Act on Biodiversity* is exemplary for the following reasons: it overrides all other inconsistent legislation and thus mainstreams biodiversity into all other policies; it adopts a primarily preventive approach (prevention of chemical pollution, alien species, global warming) and a long-term viewpoint; it implements the concept of *Satoyama*, or sustaining and restoring bio-cultural landscapes that exemplify the ideal of living fruitfully in harmony with nature; the respective responsibilities of national and local businesses, citizens, and private bodies are clear; it integrates local efforts with those occurring through national and regional biodiversity strategies; it promotes Environmental Impact Assessments on biodiversity; and, it promotes international co-operation and coordination.

³¹² CBD, *Review of Progress in Implementation of the Strategic Plan for Biodiversity 2011 – 2020, Including the Establishment of National Targets and the Updating of National Biodiversity Strategies and Action Plans*, UNEP/CBD/COP/11/INF/12, <http://www.cbd.int/cop11/doc>

³¹³ *Supra*, NBSAP 2012.

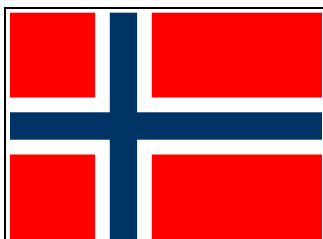
³¹⁴ *Ibid*, NBSAP 2012 at 2.

³¹⁵ *Ibid*, NBSAP 2012 at 57.

³¹⁶ *Ibid*.

³¹⁷ *Ibid*, at 58.

³¹⁸ *Ibid*.



4.5 Norway, Nature Diversity Act (2009)

Background

Stretching northward, Norway is a country covered nearly half by mountainous and plateau regions, a portion of which is covered by glaciers, as well as a significant forested land. Less than five percent of the total land mass is dedicated to urban and farmland.³¹⁹ While domestic policies have reduced the rate of biodiversity loss, and there is a growing continental coordinated approach to monitoring and long-term strategic planning, a difficulty remains in monitoring of biodiversity indicators and collection of data to feed into the planning process.³²⁰ Development of sectoral policies, responsibilities and a coordinated use of instruments will assist in informing and initializing awareness of biodiversity drivers. Cross-sectoral research, mapping and monitoring in coordination with civil society is needed to enhance knowledge of biodiversity to support sustainable use and conservation practices. Lastly international cooperation on biodiversity and climate change measures is a key component underlying successful mitigation and reduction of biodiversity loss.³²¹

Analysis of Legislation

Background of the Law

Norway's 2009 *Nature Diversity Act*³²² (NDA) is the primary legislation for the protection of biodiversity and aims to implement the Convention on Biological Diversity in a holistic way. Norway was also the first developed country to ratify the Nagoya Protocol, with Regulations being developed for synergistic application of the NDA and the Marine Resources Act of 2008 regarding access to genetic resources.

Objective

The established purpose of the Act is “to protect biological, geological and landscape diversity and ecological processes through conservation and sustainable use, and in such a way that the environment provides a basis for human activity, culture, health and well-being, now and in the future, including a basis for Sami culture.”³²³ A comprehensive objective established and exposes the main driving factors behind the Act.

The NDA provides a wide range of both precise but broad definitions for the application of the Act. Biological diversity is defined broadly as “ecosystem and species variability and intra-species genetic variability, and the ecological relationships between ecosystem components” which is related to

³¹⁹ Norway, “Fourth Report to the CBD” (2009), at 5, available at: <http://www.cbd.int/doc/world/no/no-nr-04-en.pdf>. [4th Report to CBD]

³²⁰ *Ibid*, 4th Report to CBD, at 8-9.

³²¹ *Ibid*, 4th Report to CBD, at 87-90.

³²² Norway, *Act of 19 June 2009 No. 100 Relating to the management of biological, geological and landscape diversity* (Nature Diversity Act), available at: <http://www.regjeringen.no/en/doc/laws/acts/nature-diversity-act.html?id=570549>. [NDA, Nature Diversity Act]

³²³ Nature Diversity Act, s. 1.

‘biological, geological and landscape diversity’ defined as all diversity that is not largely a result of human interference.³²⁴ Habitat type is defined as a homogeneous environment including all plant and animal life and environmental factors that operate there, or special types of natural features such as ponds, habitat islands, and special types of geological features,³²⁵ and an ‘area with specific ecological functions’ as one that fulfils an ecological function for a species, such as a spawning, nursery or larval drift area, migration route, feeding, moulting or overnighing area, display ground or mating area, breeding area, overwintering area or habitat, the delimitation of which may change over time.³²⁶ The utilization of such a wide range of broadly applicable definitions aims to be mutually supportive of the equally broad objective.

Principles

Chapter II establishes the general provisions on sustainable use of biodiversity, including: management objectives to maintain the diversity of the habitat types and ecosystems,³²⁷ management objectives for species,³²⁸ and a general duty of care relating to biodiversity.³²⁹ Principles for official decision making are established,³³⁰ which include: both science and traditional knowledge as a basis for decision making,³³¹ the precautionary principle,³³² the ecosystem approach,³³³ the ‘users pay’ principle,³³⁴ environmentally sound techniques and methods of operation,³³⁵ quality norms for biodiversity,³³⁶ and other important public interests including those of the indigenous (Sami) community.³³⁷ All sectors must apply these principles as guidelines when exercising public authority. Decisions shall state how the principles have been applied in an assessment.³³⁸

Chapter III governs the harvesting and removal of wildlife from the environment under sustainable species management principles.³³⁹ Regulations are to be adopted on the protection of priority species and trade in endangered species,³⁴⁰ including, in cases of immediate danger of extinction, empowerment of the competent national authority to take *ex-situ* conservation measures to support domestic efforts.³⁴¹ Chapter IV provides for the regulation of alien organisms, with a general duty of care established over introduction,³⁴² and import and release of alien species subject to a permit.³⁴³ A permit may not be granted if there is reason to believe that the release will have substantial adverse impacts on biological diversity.³⁴⁴

³²⁴ *Ibid*, s. 3(c) and (i).

³²⁵ *Ibid*, s. 3(j).

³²⁶ *Ibid*, s. 3(r).

³²⁷ *Ibid*, Nature Diversity Act, s. 4.

³²⁸ *Ibid*, s. 5.

³²⁹ *Ibid*, s. 6.

³³⁰ *Ibid*, s. 7.

³³¹ *Ibid*, s. 8.

³³² *Ibid*, s. 9.

³³³ *Ibid*, s. 10.

³³⁴ *Ibid*, s. 11.

³³⁵ *Ibid*, s. 12.

³³⁶ *Ibid*, s. 13.

³³⁷ *Ibid*, s. 14.

³³⁸ *Ibid*, s. 7 (second para).

³³⁹ *Ibid*, s. 15.

³⁴⁰ *Ibid*, s. 22-24, 26.

³⁴¹ *Ibid*, s. 27.

³⁴² *Ibid*, s. 28.

³⁴³ *Ibid*, ss. 29-30.

³⁴⁴ *Ibid*, s. 30.

Chapter V addresses protected areas and national parks. With the goal of conservation of biodiversity, natural habitats, and areas of special conservation value,³⁴⁵ the government can establish different types of protected areas,³⁴⁶ including: national parks,³⁴⁷ protected landscapes,³⁴⁸ nature reserves,³⁴⁹ habitat management areas,³⁵⁰ and marine protected areas,³⁵¹ to ensure the integrity of ecosystems and areas of vulnerability. Planned proposals are to be announced publically for consultation, with steps to be taken to establish the cooperation of public authorities and stakeholders who have a special interest in the proposal at an early stage to collaboratively develop regulations.³⁵² The proposal must also be submitted to municipal, country and central authorities, as well as the Sami Parliament, for consultation and comment.³⁵³ Norway takes a cross-sectoral approach to the governance of biodiversity conservation and use, requiring each ministry to monitor biodiversity, be aware of the environmental impact of activities within its sphere of responsibility, and work together cooperatively.³⁵⁴

Institutional Arrangements

Chapter VIII addresses the competent national authority. The highest power under the Act is the King, who is empowered to delegate decision making and implementation powers to municipal authorities who show competency. These municipal authorities may be designated as the competent authority under further regulations. Regulations may be issued to provide instructions to municipal authorities in the execution of their powers, with the ability to appoint a specialty body as the administrative authority for areas designated as a 'protected area'.³⁵⁵ In practice the Norwegian Ministry of Climate and Environment is the competent national authority, with responsibilities delegated to Ministry of Fisheries over marine biodiversity.³⁵⁶ Commonly applicable Regulations are being developed jointly by the Ministry of Climate and Environment and Ministry of Fisheries over access to marine genetic resources.

An appeals body, the Directorate for Nature Management, is established for decisions of municipal authorities under the Act. The county governor is able to appeal, by right, the verdicts made by applicable authorities in execution of their duties.³⁵⁷ Supervision of the state of the environment falls to the Ministry,³⁵⁸ with the supervisory authority and/or the police empowered with unimpeded powers of investigation to enforce the powers of the act.³⁵⁹ Parties in possession of genetic material or doing anything that could impact biodiversity, have a duty to provide the supervising authority with the requisite information needed to facilitate the application of the provisions.³⁶⁰

³⁴⁵ *Ibid*, s. 33.

³⁴⁶ *Ibid*, s. 34.

³⁴⁷ *Ibid*, s. 35.

³⁴⁸ *Ibid*, s. 36.

³⁴⁹ *Ibid*, s. 37.

³⁵⁰ *Ibid*, s. 38.

³⁵¹ *Ibid*, s. 39.

³⁵² *Ibid*, Nature Diversity Act, s. 42.

³⁵³ *Ibid*, Nature Diversity Act, s. 43.

³⁵⁴ Norway, "Norway's national report on the Implementation of the Convention on Biological Diversity" (2009) at 51, http://www.regjeringen.no/upload/MD/Vedlegg/Rapporter/Norways_national_report_on_implementation_of_the_convention_on_biological_diversity.pdf.

³⁵⁵ *Ibid*, Nature Diversity Act, s.62.

³⁵⁶ Norway, Marine Resources Act, 2009.

³⁵⁷ *Supra*, Nature Diversity Act, s.62 (second para.)

³⁵⁸ *Ibid*, Nature Diversity Act, s.63.

³⁵⁹ *Ibid*, Nature Diversity Act, s.64.

³⁶⁰ *Ibid*, Nature Diversity Act, s.65.

Legal and Policy Instruments/Content

Access and Benefit Sharing

Chapter VII regulates access to genetic material. Genetic material is provided a broad definition,³⁶¹ is identified as a common resource of the country, with the State empowered with management, and the utilization must be for the greatest benefit domestically and internationally, with benefits shared in a fair and equitable fashion, and in such a way as to safeguard the interest of ILCs.³⁶²

Regulations under the Act includes requirement of a permit for collection and use of genetic material and traditional knowledge, the terms and conditions for that permit including equitable benefit sharing, and measures aimed to protect the interests of landowners and ILCs.³⁶³ Collections from the natural environment fall within the gambit of the Act, but collection for use strictly in public collections and for the use of breeding and cultivation in agriculture or forestry do not require a permit. Benefits that are accrued, both monetary and non-monetary, will accrue with the state.³⁶⁴

Any person who manages a public collection must register any genetic material which is removed from the collection and provide public access to the registry. Further, if one receives genetic material via a public collection, they are restricted from claiming any IP or other such rights that would hinder its use for food and agricultural purposes. The competent national authority is further empowered to pursue legal action, if needed, against any party aiming to enforce rights in contravention of the Act.³⁶⁵ Lastly, this provision also aims to implement provisions of the Multilateral System under the International Treaty on Plant Genetic Resources for Food and Agriculture (ITPGRFA). All imported genetic material for utilization in Norway, which is sourced from a jurisdiction requiring prior informed consent, must be accessed in compliance with such provisions. Importation of genetic material for commercial or non-commercial purposes requires disclosure of country of origin and providing country, along with documentation showing compliance with domestic access provisions, including PIC and MAT if so required.³⁶⁶ This user measure allows for the enforcement of the requirements for consent in Norway.

The *Patents Act* integrates ABS considerations into the patent process by requiring a patent applicant to disclose the origin of biological material and traditional knowledge and obtain prior informed consent if required in the country of origin and the *Plant Variety Act* contains a similar provision.³⁶⁷

Environmental Impact Assessments

As a component of the general duty of care in relation to biodiversity, the CNA, in exercising authority over the allocation of grants and in the management of real property, must take special account of the selected protected area types and aim to avoid reduction of the range of habitat diversity and degradation of ecosystem status. Prior to a decision being made on a particular work in an area, an assessment of the impact on the ecosystem must be ascertained. The number and scope of the environmental impact assessment must be established in Regulations.³⁶⁸

³⁶¹ *Ibid*, Nature Diversity Act, s. 3(f).

³⁶² *Ibid*, Nature Diversity Act, s. 57.

³⁶³ *Ibid*, Nature Diversity Act, s. 58.

³⁶⁴ *Ibid*.

³⁶⁵ *Ibid*, Nature Diversity Act, s. 59.

³⁶⁶ *Ibid*, Nature Diversity Act, s. 60.

³⁶⁷ Norway submission to WIPO.

³⁶⁸ *Ibid*, Nature Diversity Act, s.53.

Administrative Mechanisms

Important measures to mitigate unlawful activities are also included. The competent authority may require the immediate cessation of activities deemed contrary to the Act. Parties who cause risk to biodiversity shall take preventative and mitigation measures necessary to preserve or return to the original state of biodiversity.³⁶⁹ To ensure compliance, the competent authority may impose a coercive fine based on reasonable failure to meet a fixed time limit, imposed 'in advance' if needed, or remaining in place for as long as the unlawful action persists.³⁷⁰

Biodiversity Plans

In addressing risks to biodiversity in coordination with quality norms, the CNA shall develop plans for the execution of activities in consultation with other impacted authorities to minimize, mitigate or avoid risks to biodiversity generally,³⁷¹ or in protected areas, national parks, protected landscapes, and nature reserves,³⁷² with plans to be announced publically.³⁷³

Public Participation

Public consultations are announced for planned proposals for protected areas in widely available newspapers, and in a manner to ensure interested parties are made aware of the proposal. Prior to the proposal being announced publically, cooperation must be established among public authorities, organizations, and stakeholders that have an interest in the protective measure.³⁷⁴ Proposed regulations are also to be circulated for comment with authorities at the municipal, county and national level, as well as with the Saami Parliament.³⁷⁵

Sanctions and penalties

Chapter IX outlines enforcement and sanctions. Any person who causes a risk to biodiversity has a duty to take reasonable mitigation measures to remedy the situation. If environmental degradation has occurred, the duty extends to preventing further reduction and if possible restoring the site to the original state.³⁷⁶ When projects result in unforeseen environmental impacts, the CNA can order reasonable mitigation measures to limit damage.³⁷⁷ Where there is a failure to comply, the CNA may take steps to direct implementation to ensure the mitigation measures are enforced.³⁷⁸ A coercive fine may be imposed until the situation is reasonably brought into accordance with the Act, with the ability to enforce the cost of the fine imposed on the parent organization if applicable.³⁷⁹ Environmental compensation must be paid to the state for acts which damage or degrade biodiversity.³⁸⁰

Wilful or negligent contravention can be punished by fines and/or imprisonment of a term not exceeding one year. Gross contravention of the provisions established in the Act is punishable by fine and/or imprisonment for up to three years. The consideration of 'gross contravention' shall focus on the significance of the risk to further damage to biodiversity, if the damage is deemed

³⁶⁹ *Ibid*, Nature Diversity Act, s. 69.

³⁷⁰ *Ibid*, Nature Diversity Act, s. 73.

³⁷¹ *Ibid*, Nature Diversity Act, s. 13, 24.

³⁷² *Ibid*, Nature Diversity Act, s. 33, 35-36,

³⁷³ *Ibid*, Nature Diversity Act, s. 42.

³⁷⁴ *Ibid*, Nature Diversity Act, s. 42.

³⁷⁵ *Ibid*, Nature Diversity Act, s. 43.

³⁷⁶ *Ibid*, Nature Diversity Act, s. 69.

³⁷⁷ *Ibid*, Nature Diversity Act, s. 70.

³⁷⁸ *Ibid*, Nature Diversity Act, s. 71.

³⁷⁹ *Ibid*, Nature Diversity Act, s. 73.

³⁸⁰ *Ibid*, Nature Diversity Act, s. 74.

irreversible, the degree of fault held by the parties, and with due consideration to preventative and mitigation measures taken.³⁸¹

Failure to disclose the information required in the Patents Act section 8b is subject to civil penalties (fines and/or imprisonment) in accordance with s. 166 of the General Civil Penal Code.

Monitoring/Follow up and Review

The Ministry supervises the state of the natural environment and monitors compliance with the provisions laid down in and under the Act. The supervisory authority decides the areas that shall be subject to supervision. The supervisory authority shall carry out sufficient control and inspection measures to be able to detect breaches of provisions. The authorities shall promote achievement of the objectives of this Act by providing advisory services, guidance and information.³⁸²

Analysis and lessons learned

Successes

The *Nature Diversity Act* lays out a broad framework for sustainable, participatory and precautionary management of biodiversity. It promotes the principle of “integration and interrelationship” by connecting the protection of diversity with support for human well-being and recognizing the importance of historical and cultural landscapes in the preservation of diversity. This includes a variety of instruments including provisions on nature protection and sustainable use of diversity, such as Priority Species and Selected Habitat Types. These instruments reflect that nature is constantly changing, allowing the NDA’s administrators to use tools beyond rigid nature conservation (i.e. protected areas) to protect biodiversity.

The Act enables the authorities to give clear signals on which species and habitat types are most important to safeguard, among other things through the provisions relating to knowledge-based management. The Act improves coordination of efforts to safeguard biological, geological and landscape diversity, since sectors that put pressure on or utilise natural resources will be required to give weight to objectives and principles (e.g. the precautionary principle, assessment of cumulative environmental effects and the user-pays principle) and rules on selected habitat types in their management activities. The procedural rule in Chapter II section 7 stating that “decisions shall state how the principles have been applied in an assessment” makes the application of the principles in public decision-making transparent and in effect making it possible to control and check the development in each sector. Failure to comply with this duty can lead to the decision being invalid if there is reason to believe that the failure to comply has influenced the decision.

Remaining Challenges

Norway’s ABS measures address some of the major problems that exist with ABS today, notably monitoring of compliance with a provider country’s legal provisions and observance of those provisions in user countries. Non-compliance with legislative or contractual provisions imperils the ABS regime in its entirety. Provider countries need the ability to enforce their legal requirements abroad, and this ability largely depends upon mechanisms for access to justice and the existence of administrative or judicial remedies. Strong measures that support compliance with access conditions are necessary to maximise equity and fairness in ABS. It has been said that: “In effect, any international regime will require a cooperative effort between the providers and users of genetic resources and traditional knowledge and will require that both take actions to mutually support the

³⁸¹ *Ibid*, Nature Diversity Act, s. 75.

³⁸² *Ibid*, Nature Diversity Act, s. 63.

common objectives of the CBD relating to fair and equitable benefit-sharing”.³⁸³ Norway’s legislation is noteworthy in this regard, protecting both Norway’s interests and those of provider countries. Effective user measures help to build trust in the development of ABS relations by resolving – at least to a certain degree – the costs and problems associated with access to justice in foreign countries in cases of non-compliance.

Generally speaking, the following can be said about Norway’s biodiversity law:

- Norway’s regime creates a framework in which sustainable use of genetic resources can be achieved through permitting requirements and information-gathering.
- The Nature Diversity Act’s rule against claiming IP rights and other rights in resources from public collections protects the public from unfair appropriations.
- It also introduces an element of public participation because it empowers individuals to assert the public’s rights in these resources.
- The explicit recognition of genetic material as a common resource invites an approach to regulation and enforcement that enhances equity and human security both within Norway and beyond its borders.
- Norway’s ABS regime has the potential to further sustainability, equity, public participation and human security. Much depends on Norway’s adoption of effective regulations.
- Certificates of origin-source-legal provenance and disclosure of origin in IPR applications are recognized mechanisms for facilitating the enforcement of ABS regulations; Effective user measures help to build trust in the ABS relationship by solving the problem of access to justice in cases of non-compliance.

³⁸³ Barber, Charles, et al., *User Measures: Options for Developing Measures in User Countries to Implement the Access and Benefit Sharing Provisions of the Convention on Biological Diversity*, UNU/IAS, Japan, 2003.



4.6 South Africa, National Environmental Management Biodiversity Act 2004

Background

South Africa is diverse not only in terms of people and culture but also in terms of biological resources and ecology.³⁸⁴ With only 2% of the planet's land area, the country is home to 6% of the world's plant and mammal species, 8% of bird species and 5% of reptile species, many of which are found only in South Africa. With nine biomes ranging from Desert to Grassland to Forest, South Africa has a huge range of habitats, ecosystems and landscapes. The country has three of 34 globally recognized biodiversity hotspots: the Cape Floristic Region, which falls entirely within South Africa; the Succulent Karoo, shared with Namibia; and the Maputaland-Pondoland-Albany hotspot, shared with Mozambique and Swaziland. South Africa's seas straddle three oceans, the Atlantic, the Indian and the Southern Ocean, and include an exceptional range of habitats, from cool-water kelp forests to subtropical coral communities. The southern African coast is home to almost 15% of known coastal marine species, including 270 marine fish families out of a world total of 325. South Africa is recognised as one of only 17 megadiverse countries.

This vast wealth of biodiversity assets provides a foundation for economic growth, social development and human wellbeing.³⁸⁵ However, the country's unique biodiversity is heavily threatened by the three interrelated threats of habitat destruction, climate change and invasive alien species.³⁸⁶ The new political climate in 1994 after the end of apartheid brought about a significant shift in thinking in the biodiversity conservation sector. The core focus remained to understand, protect, manage and use the country's rich and valuable biodiversity resources wisely, but with a new focus on ecosystems, social justice and socio-economic development. Specifically, conservation had to embrace participatory approaches to decision-making and help keep people on the land in production landscapes that support sustainable livelihoods.³⁸⁷

While significant progress has been made in achieving the objectives of the Convention, further strengthening and refining of the policy and legislative framework is needed. The message of the biodiversity sector needs to be reframed to shift communication models to allow for more constructive discussions around biodiversity assets and ecological infrastructure. Influencing the policy environment requires flexibility and adaptability and cannot be an overly politically-charged process. Mainstreaming of biodiversity goals requires both institutional and individual shifts in perspective which requires time to acclimate. Spatial assessment of biodiversity is a prerequisite to

³⁸⁴ Based on Tshikonelo Stanley Tshitwamulomoni, *South Africa National Environmental Management: Biodiversity Act 2004*, <http://www.cisd.org/aichilex/Target17-SouthAfrica2004>

³⁸⁵ Driver A., Sink, K.J., Nel, J.N., Holness, S., Van Niekerk, L., Daniels, F., Jonas, Z., Majiedt, P.A., Harris, L. & Maze, K. 2012. *National Biodiversity Assessment 2011: An assessment of South Africa's biodiversity and ecosystems. Synthesis Report*, (South African National Biodiversity Institute and Department of Environmental Affairs (SANBI): Pretoria, 2011), available at: http://bgis.sanbi.org/nba/NBA2011_SynthesisReport_lowres.pdf

³⁸⁶ *Ibid* at 9.

³⁸⁷ Mandy Cadman, Caroline Petersen, Amanda Driver, NikSekhran, Kristal Maze, ShonisaniMunzhedzi, *Biodiversity for Development: South Africa's Landscape Approach to Conserving Biodiversity and Promoting Ecosystem Resilience* (2010), SANBI at 25, available at: https://cmsdata.iucn.org/downloads/primer_11_2_mb.pdf. [Biodiversity for Development]

effective expansion of protected areas, mainstreaming and restoration processes. Strategic partnerships between multiple stakeholders provide a key to achieving biodiversity goals in the long-term.³⁸⁸

Analysis of Legislation

Background of the Law

South Africa's 1996 Constitution and Bill of Rights create the overall framework for environmental governance in the country. Although the Constitution does not specifically refer to biodiversity as such, it enshrines environmental rights,³⁸⁹ and specifies the powers and functions of national and provincial governments over the environment, nature conservation and natural resources, such as soil, water, forests and marine resources. In keeping with these Constitutional provisions, three key pieces of legislation set out the principles and procedures governing biodiversity management in the country: the National Environmental Management Act of 1998 (NEMA), the Protected Areas Act of 2003 (NEPAA) and the Biodiversity Act of 2004 (NEMBA).³⁹⁰

Objectives

In response and to implement the core requirements CBD,³⁹¹ a South African NBSAP was released in 2005 through extensive stakeholder consultation led by Department of Environmental Affairs (DEA).³⁹² It was informed by a spatial component also released in 2005, the National Spatial Biodiversity Assessment. The NBSAP was formalized as a policy instrument in the 2008 National Biodiversity Framework (NBF),³⁹³ which establishes priority actions to guide the biodiversity sector in South Africa and is reviewed every five years.³⁹⁴

Principles

Chapter 3 of NEMBA governs biodiversity planning and monitoring, with the first object being to provide for integrated and coordinated biodiversity planning.³⁹⁵ Section 38 requires the Minister to prepare and adopt a NBF within three years of the coming into effect of the Act. It also requires the Minister to monitor implementation of the NBF and review it at least every five years.³⁹⁶ The NBF must be published by notice in the *Gazette* along with any future amendments by the Minister. Section 39 of the Act defines the content of the NBF. It mandates that the NBF: provide for an integrated, co-ordinated and uniform approach to biodiversity management by organs of state in all spheres of government, non-governmental organisations, the private sector, local communities, other stakeholders and the public.³⁹⁷

³⁸⁸ South Africa, "South Africa's Fifth Report to the Convention on Biological Diversity" (March 2014), at 79-82, available at: <http://www.cbd.int/doc/world/za/za-nr-05-en.pdf>. [5th Report to CBD]

³⁸⁹ Section 24 of the Constitution states that all South Africans have the right to an environment that is not harmful to their health and well-being, and is protected for the benefit of present and future generations, through reasonable legislative and other measures that prevent pollution and ecological degradation, promote conservation, and secure ecologically sustainable development and use of natural resources, while promoting justifiable economic and social development.

³⁹⁰ *Supra*, Biodiversity for Development, at 30.

³⁹¹ South Africa, National Environmental Management Biodiversity Act (2004), s. 2, available at: <http://ship.mrc.ac.za/biodiversity.pdf>. [NEMBA]

³⁹² *Ibid*, Biodiversity for Development, at 36

³⁹³ South Africa, National Biodiversity Framework, South African Gazette No 32474, 3 August 2009.

³⁹⁴ *Supra*, Biodiversity for Development, at 36.

³⁹⁵ *Supra*, NEMBA s 37.

³⁹⁶ *Ibid*, NEMBA, s 38.

³⁹⁷ *Ibid*, NEMBA, s 39.

Innovative biodiversity management concepts and tools of legal standing have been developed based on the Act.³⁹⁸ For instance, in line with Chapter 4 of the Act, the NBSAP focuses on ecosystem and species conservation to ensure efficiency and adaptation to climate change. Within the focus on identifying critical biodiversity areas and ecological support areas, such as wetlands and water yield catchments, the NBSAP gives explicit consideration to climate change principles.³⁹⁹

Chapter 6 of the Act regulates bioprospecting of genetic resources to ensure that the benefits arising from the commercialization of traditional uses or knowledge of indigenous biological resources are equitably shared with ILCs.⁴⁰⁰ Genetic material of human origin, exotic animals/plants or other organisms other than those that have been altered with material from indigenous species, and indigenous biological resources listed in terms of the ITPGRFA are all excluded from the scope of the regulation.⁴⁰¹

Bioprospecting of indigenous biological resources necessitates filling for a permit,⁴⁰² which requires PIC of the State and providing ‘stakeholders,’⁴⁰³ and or ILCs,⁴⁰⁴ and the establishment of a benefit-sharing agreement in order to use traditional knowledge and the agreement must include certain information.⁴⁰⁵ Ministerial approval of all benefit-sharing or material transfer agreements is required. Those issuing permits may also facilitate negotiations between the applicants and ‘stakeholder’ to ensure they are on an equal footing, or may be required by the Minister to ensure the arrangement is fair and equitable.⁴⁰⁶ Benefit-sharing agreements must include the following information: the parties to the agreement, the manner in which and the extent to which the resources are to be used or exploited for bioprospecting, the manner in which and the extent to which the stakeholder will share in any benefits that may arise, and provision for a regular review of the agreement.⁴⁰⁷

Institutional Arrangements

The Department of Environmental Affairs has overall responsibility for the implementation of NEMBA. The Minister is responsible for developing, implementing and reviewing the NBF, making amendments to it, and must publish it in the Gazette. Protection of species and ecosystems that warrant national protection, monitoring sustainable use of indigenous biological resources, and ensuring the fair and equitable sharing of benefits arising from bioprospecting involving indigenous biological resources, fall to the South African National Biodiversity Institute (SANBI).⁴⁰⁸

SANBI also manages the National Botanic Gardens of South Africa, and must establish and maintain *ex situ* collections of plants in national botanical gardens and in herbaria, and establish collections of animals and micro-organisms in appropriate enclosures. Additional duties include establishing facilities for horticulture display, environmental education, visitor amenities and research and collecting, generating, processing, coordinating and disseminating information about biodiversity and the sustainable use of indigenous biological resources. This involves establishing

³⁹⁸ *Supra*, Biodiversity for Development, at 43.

³⁹⁹ *Ibid.*

⁴⁰⁰ *Ibid.*, NEMBA, s 80.

⁴⁰¹ *Ibid.*, NEMBA, s 80(2)(b).

⁴⁰² *Ibid.*, NEMBA, s 81.

⁴⁰³ “stakeholder” means — (a) a person, an organ of state or a community contemplated in section 82(1)(a); or (b) an indigenous community contemplated in section 82(1)(b).

⁴⁰⁴ *Ibid.*, NEMBA, s 82.

⁴⁰⁵ *Ibid.*, NEMBA, s 83.

⁴⁰⁶ *Ibid.*, NEMBA, s 82(4)(b) and (4)(c).

⁴⁰⁷ *Ibid.*, NEMBA, s 83(1)(b-g).

⁴⁰⁸ *Ibid.*, NEMBA, s 10-11.

databases on biodiversity and its sustainable use as well as promoting research on indigenous biodiversity and the sustainable use of indigenous biological resources. It is also tasked with coordinating programmes for the rehabilitation of ecosystems and the prevention, control or eradication of listed invasive species. Lastly, SANBI is tasked with assisting the Minister of Environmental Affairs in exercising legislated powers pertaining to biodiversity, including advice on listed ecosystems, implementation of the Act and any international agreements, identification of bioregions and the contents of any bioregional plans, management and conservation of biological diversity, sustainable use of indigenous biological resources, and management of, and development in, national protected areas.⁴⁰⁹

Legal and Policy Instruments/Content

Public participation

Prior to the exercise of power under the Act, the consultations must be established with cabinet members whose responsibilities will be impacted in accordance with the principles of cooperative governance and allow for public participation in the consultation process.⁴¹⁰ Notice of consultation shall be filed in the Official *Gazette*, and both a national and local newspaper of the impacted region, with notice including sufficient information to inform the public allowing for possible objection and an open period for written submissions of 30 days.⁴¹¹

Environmental Impact Assessment

A permit may only be issued for activities involving protected or threatened species, alien or alien invasive species, bioprospecting or export of indigenous biological resources,⁴¹² following an assessment of the risks and potential impacts to biodiversity.⁴¹³

Indicators of success

The NBSAP and NBF have led to progress in biodiversity planning in South Africa. The NBSAP provides a comprehensive long-term strategy, including fifteen year targets. The NBF provides a framework to coordinate and align the efforts of the many organisations and individuals in conserving and managing biodiversity in support of sustainable development. It aims to focus attention on the most urgent strategies actions required over a five year period, and assign roles and responsibilities of key stakeholders, including organs of state whose mandates impact on biodiversity conservation and management. At its heart lie 33 Priority Actions which provide an agreed set of priorities to guide the work of the biodiversity sector and focus collective attention and effort on the activities that will make the most difference. Progress has also been made with regard to the various targets for protected areas coverage and to mainstreaming biodiversity across sectors, especially in terms of spatial planning and decision-making, through development of bioregional plans. Business and biodiversity initiatives have been established, and various fiscal incentives to promote sustainable biodiversity management are under development.⁴¹⁴

Sanctions and penalties

Acts in contravention of the terms established by the NEMBA are deemed offences under the Act,⁴¹⁵ and are liable to a fine and/or imprisonment of a period not exceeding five years.⁴¹⁶

⁴⁰⁹ *Ibid*, NEMBA, s 11-12.

⁴¹⁰ *Ibid*, NEMBA, s 99.

⁴¹¹ *Ibid*, NEMBA, s 100.

⁴¹² *Ibid*, NEMBA, s 87.

⁴¹³ *Ibid*, NEMBA, s 65.

⁴¹⁴ Christian Prip et al, *Biodiversity Planning: an assessment of national biodiversity strategies and action plans* at 32

⁴¹⁵ *Ibid*, NEMBA, s 101.

Monitoring

Mechanisms for monitoring the conservation status of components of biodiversity are to be developed and established by the Minister to determine both positive and negative trends affecting conservation efforts.⁴¹⁷ Ongoing research at the national, state, and local levels must be promoted to determine the status of biodiversity, threatening activities, and to assess and determine effective strategies and priorities to foster protection, conservation and sustainable use of biodiversity.⁴¹⁸

Funding

A fund is established, with funds provided by income derived from the exercise of its duties, money appropriated by Parliament, grants provided by organs of the state, voluntary contributions or donations, loans, income derived from investments and any other public funds received. The fund is used to invest in such a manner as to support biodiversity conservation and must be consistent with the policy prescribed by the Public Finance Management Act and/or in a manner approved by the Minister.⁴¹⁹ A bioprospecting fund is also established to govern, administer and disperse funds arising out of benefit sharing agreements and mutually agreed terms⁴²⁰

Analysis and lessons learned

South Africa has had success in reversing the negative pressures on biodiversity through the implementation of its *National Environmental Management: Biodiversity Act, 2004* within the framework of the *National Environmental Management Act, 1998*. By nesting biodiversity within the broader environmental legal framework, a greater degree of certainty can be established in the relationship between overlapping laws and policies. The implementation of Access and Benefit-Sharing provisions within the law is comprehensive and has been used to some effect in challenging cases of patenting of indigenous genetic resources and traditional knowledge because of lack of benefit sharing agreements and consent of stakeholders. The independent regulation of GMOs is not an effective way to address the innate interrelationship between biodiversity and biosafety and the integration of considerations necessary for future justice and sustainability.

Successes

Much biodiversity conservation work has been carried out in global biodiversity hotspots through GEF and other funding, but this is uneven across the country and has not yet prioritised areas where high poverty and high ecosystem productivity coincide. Gains made through bioregional programmes with donor funding have resulted in many of the targets of the NBSAP being addressed. Some gains were sustained beyond the funded period and functions embedded into provincial and local government, but many challenges remain, particularly the challenge of resourcing biodiversity stewardship work with communal and private landowners.

⁴¹⁶ *Ibid*, NEMBA, s 102.

⁴¹⁷ *Ibid*, NEMBA, s 49.


⁴¹⁸ *Ibid*, NEMBA, s 50.

⁴¹⁹ *Ibid*, NEMBA, s 31-32.

⁴²⁰ *Ibid*, NEMBA, s 85.

Remaining Challenges

Provincial conservation authorities and municipalities lack skills and resources to tackle biodiversity management mandates – and it is at these levels that many critical decisions are taken affecting biodiversity. In particular, provincial authorities have a limited emphasis on monitoring and limited capacity for monitoring in relation to achieving targets set out in the NBSAP and NBF. Lead agents have lacked capacity and human resources to implement the NBSAP and NBF fully. Many of the priorities have been tackled, but not in a systematic way, with priority actions being allocated, costed and resourced. Progress has been made in mainstreaming biodiversity into spatial and development planning at local and provincial levels, but much work remains to be done, particularly in relation to major economic sectors such as mining, agriculture, forestry and fisheries.

	<h2 style="text-align: center;">4.7 South Korea, Natural Environment Conservation Act (Amended 2008)</h2>
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Background

South Korea is a predominantly mountainous environment with a wide range of biodiversity living in both warm and cold climates. Nearly two-thirds of the country is covered by forested areas, with inland territory defined by geographic conditions including minimal rain outside of the rainy season, crosscutting rivers and streams, and a long and well-developed coastal region contributing to an estuarine ecosystem.⁴²¹ South Korea has developed two iterations of its National Biodiversity Strategy, with major components focused on establishing a cross-sectoral approach to protection of biodiversity, promotion of sustainable use of natural resources based on an eco-systems approach, addressing invasive species and maintaining biodiversity as a component of human well-being, protecting knowledge, innovations and practices in support of conservation of biodiversity, and ensuring equitable sharing of benefits arising from use of biological resources.⁴²² The challenges of climate change and ecosystem degradation have exacerbated the need for action, with policy focus on raising public awareness to biodiversity.⁴²³

Analysis of Legislation

Background of the Law

South Korea has continually worked to develop and implement strategies in support of sustainable development following the Rio-summit in 1992. The Natural Environment Conservation Act (as Amended 2008)⁴²⁴ is aimed to implement systematic biodiversity conservation measures to preserve and protect the natural environment for future generations.

Objectives

The purpose of the Act is to seek sustainable utilization of nature and to empower people to lead a healthy life in harmony with the natural environment through systematic conservation and management aimed at prevention and protection of the environment from artificial damage and ecosystem degradation.⁴²⁵ The core objective is supported through the use of broadly defined definitions which focus on systematic conservation of biodiversity, harmonizing life with the environment and preservation of natural scenery.⁴²⁶ Sustainable use of natural resources is based on

⁴²¹ Republic of Korea, “Fourth Report to the Convention on Biological Diversity” (2009), at 1-3, available at: <http://www.cbd.int/doc/world/kr/kr-nr-04-en.pdf>. [4th Report to CBD]

⁴²² *Ibid*, 4th Report to CBD, at 15-28.

⁴²³ *Ibid*, 4th Report to CBD, at 38-40.

⁴²⁴ Republic of Korea, Natural Environment Conservation Act (as amended 2008), available at: http://dinrac.nowpap.org/documents/law/Korea/Natural_Environment_Conservation_Act_Korea.pdf. [NECA]

⁴²⁵ *Ibid*, NECA, Art 1.

⁴²⁶ *Ibid*, NECA, Art 2(1).

a recognition and respect for future generations to ensure equitable opportunities to use the natural environment.⁴²⁷

Principles

Article 3 of the NECA outlines the basic principles of conservation,⁴²⁸ including: (1) The natural environment must be conserved as a resource for all people, with use done sustainably; (2) Conservation of the biodiversity shall be done in harmony with the use of national land; (3) The environment shall be conserved and managed so as to promote a functional balance for human activity and conservation; (4) Public participation in conservation and sound use of the national environment shall be promoted; (5) The ecological equilibrium must be neither destroyed nor depreciated, with steps made to restore what destruction has occurred; (6) The burden of conservation of the environmental is borne fairly, with benefits obtained from the use of biodiversity to be shared preferentially with residents of the providing region; and (7) International cooperation shall be promoted for the conservation of the natural environment.⁴²⁹

State and local governments are to bear the responsibility of governance and administration of conservation efforts in accordance with the core principles of the Act.⁴³⁰ Functions include formulation and implementation of measures for conservation of the environment, sustainable use of the land, maintenance and restoration of ecosystems, and promotion of technology development, capacity building, and public awareness.⁴³¹ The private sector in performing their business activities are to consider natural ecology first, take the necessary measures restore environmental damage caused by business activities, and to participate and cooperation in conservation efforts at the state and local level.⁴³² The government shall also establish mechanisms to allow for local governments and the private sector to enable campaigns for the protection and conservation of nature in their respective region.⁴³³ It is the responsibility of the Minister of the Environment to draft the Basic Policy for Conservation of the Natural Environment to implement the core objectives of the Act,⁴³⁴ and shall contain systematic conservation and management of the environment, selection of ecosystems, species and biological resources to protect, and strategies for the management, improvement, protection and sustainable development of ecosystems.⁴³⁵ The head of the competent national authority and the leadership of local authorities shall develop an action plan to implement the Basic Policy as outlined by the Ministry.⁴³⁶

⁴²⁷*Ibid*, NECA, Art 2(2).

⁴²⁸*Ibid*, NECA, Art 3.

⁴²⁹*Ibid*, NECA, Art 3(1-7).

⁴³⁰*Ibid*, NECA, Art 4(1).

⁴³¹*Ibid*, NECA, Art 4(1)(1-9).

⁴³²*Ibid*, NECA, Art 4(2).

⁴³³*Ibid*, NECA, Art 5.

⁴³⁴*Ibid*, NECA, Art 6(1).

⁴³⁵*Ibid*, NECA, Art 6(2).

⁴³⁶*Ibid*, NECA, Art 6(3-4).

All local and/or regional policies or plans which have a direct relationship on conservation of the environment must be developed in consultation with the Ministry of the Environment,⁴³⁷ with the Minister empowered to develop guidelines to support the implementation.⁴³⁸ The contents of the Basic Plan for Conservation of Natural Environment are explicitly outlined,⁴³⁹ with the head of the competent national authority and local leadership informed and empowered to execute the Basic Plan,⁴⁴⁰ and review of the plan set on a biennial basis.⁴⁴¹ An information management network for the environment is also established under the Ministry of the Environment to catalogue biodiversity and the natural environment, with data harvested via request from relevant agencies.⁴⁴²

All manner of destruction, degradation and development is prohibited in conservation areas, notwithstanding accepted projects implemented by the Ministry for environmental conservation or as part of a forest or marine management plan.⁴⁴³ The Minister may order the immediate suspension of any activity in violation of the restrictions established.⁴⁴⁴ The Ministry may acquire land for conservation via transfer of pre-existing state land or through procurement of new land.⁴⁴⁵ Procedures are established to designate cities and regions as conservation areas, and specific plans developed at the state and local levels to coordinate efforts.⁴⁴⁶

Institutional Arrangements

The Minister of the Environment is empowered to designate and manage conservation areas.⁴⁴⁷ When a change of designation or ecological balance is proposed, the Ministry must establish consensus among the residents and interested parties and consult the heads of relevant agencies and go through a deliberation process with the Central Environmental Preservation Advisory Committee.⁴⁴⁸ Drafting and execution of the Basic Plan also falls to the Minister of Environment.⁴⁴⁹ Local governments are empowered to establish various facilities for the conservation, restoration and observation of biodiversity,⁴⁵⁰ and to restrict actions of the general public through ordinance

Basic Plan for Conservation – Contents

1. Current State of the Environment.
2. Setting of environmental targets and basic course of conservation.
3. Main duties to promote conservation.
4. Major conservation policies
5. Conservation strategies relating to natural scenery
6. Conservation strategies relating to important environmental support factors.
7. Major restoration projects
8. Update on operation of comprehensive geographic system.
9. Calculation of project expenses.
10. Other matters as set down by Presidential Decree.

[Art 9]

⁴³⁷*Ibid*, NECA, Art 7(1).

⁴³⁸*Ibid*, NECA, Art 7(2).

⁴³⁹*Ibid*, NECA, Art 9. [see box]

⁴⁴⁰*Ibid*, NECA, Art 10(1-2).

⁴⁴¹*Ibid*, NECA, Art 10(3).

⁴⁴²*Ibid*, NECA, Art 11.

⁴⁴³*Ibid*, NECA, Art 15(1-2), 16.

⁴⁴⁴*Ibid*, NECA, Art 17.

⁴⁴⁵*Ibid*, NECA, Art 18-19.

⁴⁴⁶*Ibid*, NECA, Art 22-25.

⁴⁴⁷*Ibid*, NECA, Art 12(1-2).

⁴⁴⁸*Ibid*, NECA, Art 13.

⁴⁴⁹*Ibid*, NECA, Art 14.

⁴⁵⁰*Ibid*, NECA, Art 38.

which have an adverse impact on biodiversity conservation.⁴⁵¹ The Ministry of the Environment, in consultation with the Ministry of Culture, Sports and Tourism will support the efforts of local governments to formulate and implement plans to foster ecological tourism.⁴⁵² State and local governments are to enhance the environmental soundness of cities to ensure areas of conservation value are preserved.⁴⁵³ Where a species or ecosystem is threatened or has been damaged, the Ministry of the Environment may prepare and promote special protection measures.⁴⁵⁴

It is the responsibility of the competent national authority in consultation with the heads of local governments to prevent damage to the environment, particularly in areas of high scenic value such as coastline, with specific ordinances to be issued over the area, and additional guidelines if needed.⁴⁵⁵ A Natural Scenery Deliberation Committee is established under the local environmental management office to investigate and discuss the environmental issues resulting from projects and participate in consultations.⁴⁵⁶

Legal and Policy Instruments/Content

Environmental Impact Assessments

EIAs are governed by separate legislation, the Environmental Impact Assessment Act. Where a permit for development is considered, consultations must be established examining the potential impacts through use of an environmental impact assessment.⁴⁵⁷

Ecological Maps

Ecological and environmental maps are to be designed to inform development, which categorize land into zones by grade: First zone – major ecological area, Second zone – area worthy of conservation, Third zone – as area used for development and utilization, separately managed zone – an area of historical/cultural significance or managed for conservation purposes.⁴⁵⁸ National measures are also to be developed and implemented for conservation of biodiversity.⁴⁵⁹ Research and technology development which supports investigation, indexing and understanding of biodiversity must be promoted nationally to support conservation efforts.⁴⁶⁰

Environmental Fees

Operators of projects which have a significant impact on the environment shall have a fee levied against them by way of Cooperation Charge on the Conservation of Ecosystems.⁴⁶¹ The charge is calculated in relation to an environmental impact assessment, and shall be based on the scale of the damage in relation to the area impacted.⁴⁶² Projects subject to a levy must be transparent with the ministry relating to the scope, scale and operators of the enterprise and the ministry will provide information relating to the amount of the levy and terms of payment, and any additional fees that may be applicable should the fee not be paid.⁴⁶³ The fees collected from the Cooperation Charge on

⁴⁵¹*Ibid*, NECA, Art 40.

⁴⁵²*Ibid*, NECA, Art 41.

⁴⁵³*Ibid*, NECA, Art 43.

⁴⁵⁴*Ibid*, NECA, Art 44.

⁴⁵⁵*Ibid*, NECA, Art 27.

⁴⁵⁶*Ibid*, NECA, Art 29.

⁴⁵⁷*Ibid*, NECA, Art 28.

⁴⁵⁸*Ibid*, NECA, Art 34.

⁴⁵⁹*Ibid*, NECA, Art 35.

⁴⁶⁰*Ibid*, NECA, Art 36.

⁴⁶¹*Ibid*, NECA, Art 46(1-2).

⁴⁶²*Ibid*, NECA, Art 46(3-6).

⁴⁶³ *Ibid*, NECA, Art 47-48.

Conservation of Ecosystem shall be used for a variety of purposes including: to fund conservation and restoration activities, support conservation organizations, purchase land of ecological significance for conservation, establish conservation facilities and execute conservation management plans.⁴⁶⁴ Cooperation is established among the Ministry of the Environment, heads of competent agencies, and heads of local government to mutually fulfill the purposes of the Act.⁴⁶⁵

Penal Provisions

Instances of environmental degradation in contravention of the Act are punishable by 2-3 imprisonment and a fine of up to twenty million won,⁴⁶⁶ with negligent acts fine ten million won.⁴⁶⁷ Where an individual commits the violation as an agent or employee of an organization, than the organization will also be fined, in addition to the individual.⁴⁶⁸

Monitoring/Follow up and Review

An investigation into the full state of the national environment must be performed by the Ministry of the Environment every ten years, with periodic reviews into designated areas every five years.⁴⁶⁹ Where the initial findings of the investigation are of concern, the Ministry of the Environment will develop a special investigation plan to identify supplementary information, in conjunction with investigative efforts at the local level.⁴⁷⁰ Investigations are carried out by designated environmental experts, with wide investigative powers.⁴⁷¹

Analysis and lessons learned

Ecosystem conservation is a national priority which requires local actualization. The establishment of protected areas is insufficient alone to conserve national systems and the key processes which sustain them. As protected areas are often established to provide protection to isolated areas, designation does not address the underlying aspects of ecological integrity. Strengthening of the EIA process is essential for the preservation of biodiversity and should incorporate socio-economic indicators in addition to the scientific approach. Interagency cooperation must be reinforced under the establishment of a joint committee for the protection of biodiversity. Lastly, public awareness of biodiversity conservation must be generated to ensure local communities recognize and understand the value of species protection and the direct link this plays to their livelihoods. Various measures should be used to support civil society and NGOs to interact and engage local communities for knowledge dissemination.⁴⁷²

⁴⁶⁴ *Ibid*, NECA, Art 49.

⁴⁶⁵ *Ibid*, NECA, Art 51.

⁴⁶⁶ *Ibid*, NECA, Art 63-64.

⁴⁶⁷ *Ibid*, NECA, Art 66.

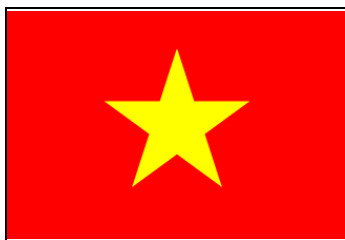
⁴⁶⁸ *Ibid*, NECA, Art 65.

⁴⁶⁹ *Ibid*, NECA, Art 30.

⁴⁷⁰ *Ibid*, NECA, Art 31.

⁴⁷¹ *Ibid*, NECA, Art 32-33.

⁴⁷² For further information see generally: Government of the Republic of Korea, “Case Study on Korean Experiences Relating to the Conservation of Biodiversity in Mount Chiri, with Special Attention to the Poaching of Bears,” available at: <http://www.cbd.int/financial/fiscalenviron/korearep-fiscalincentive-oecd.pdf>; IUCN, Connectivity Conservation: International Experience in Planning, Establishment and Management of Biodiversity Corridors,” available at: http://cmsdata.iucn.org/downloads/070723_bci_international_report_final.pdf.



4.8 Vietnam, Biodiversity Law (No. 20/2008)

Background

Vietnam has a diverse terrain, landscape and climate feeding a unique set of ecosystems and species.⁴⁷³ Biodiversity is a significant contributor to the national economy ensuring food security, maintaining livestock and providing materials for fuel, medicine and industrial development.⁴⁷⁴ While formal policies in the early 90s have mitigated and reversed forest decline nationally, a majority is in plantation forests with the natural environment remaining stagnant or declining. Marine resources are degrading rapidly due to overexploitation and severe pollution from industrial, agricultural and fisheries production as well as domestic waste.⁴⁷⁵ Strategic goals center on taking a long-term approach to protecting the unique abundance of domestic biodiversity by protecting threatened ecosystems and biodiversity threatened by human activity.⁴⁷⁶ Policy priorities aim to: raise public awareness of biodiversity, create mechanisms for cooperation and collaboration on conservation efforts, developing cross-sectoral programs to study and preserve biodiversity in response to climate change, prioritize conservation efforts, develop a system of domestic protected areas, enhance the rights of ILCs, expand oversight of illegal trade in biodiversity, and strengthen funding sources for conservation.⁴⁷⁷

Analysis of Legislation

Background of the Law

Beginning with the Law on Environmental Protection, adopted in 1993 and revised in 2005,⁴⁷⁸ Vietnam enacted several laws and regulations related to biodiversity.⁴⁷⁹ Despite these different efforts and some recent positive development in national forest coverage, a coherent legal approach to biodiversity conservation was missing and biodiversity kept declining at an alarming rate.⁴⁸⁰

⁴⁷³ This section draws upon Phan Tuan Hung and Katharina Rogalla von Bieberstein, *Target 5: Vietnam Biodiversity Law*, 2008, <http://www.cisd.org/aichilex/Target5-Vietnam2008>.

⁴⁷⁴ Vietnam, “Fourth Report to the Convention on Biological Diversity” (2009), at 9-14, available at: <http://www.cbd.int/doc/world/vn/vn-nr-04-en.pdf>. [4th Report to the CBD]

⁴⁷⁵ *Ibid*, 4th Report to the CBD, at 15-17.

⁴⁷⁶ *Ibid*, 4th Report to the CBD, at 28-32.

⁴⁷⁷ *Ibid*, 4th Report to the CBD, at 56-58.

⁴⁷⁸ Vietnam, National Assembly, No. 52-2005-QH11 Law on Protection of the Environment, available at: <http://www.dpi.hochiminhcity.gov.vn/invest/html/Law-on-Environment.html>.

⁴⁷⁹ John Copeland Nagle, “The Effectiveness of Biodiversity Law”, *Journal of Land Use and Environmental Law* (2009), Notre Dame Legal Studies Paper No. 09-45, Vol. 24:2, pg. 230, available at: <http://ssrn.com/abstract=150400>. [Nagle 2009]

⁴⁸⁰ A positive development is the increase of forests since the 1990s. However, various regions of Viet Nam – including the Central Highlands, the Central Coast and the East of southern region – still have high rates of deforestation and also mangroves are severely threatened: The REDD desk, Vietnam, statistics, online: <http://www.theredddesk.org/countries/vietnam/statistics> (accessed on 21/08/12); Armelie Guignier, “Conserving Biodiversity and Sustaining Livelihoods in the Ba Be and Na Hang Complex- A legal perspective”, Milestone Report 9.2, Vietnam June 2011, pg. 16, available at: cdn.livelihoods.eu/wp-content/uploads/2009/07/M-9.2-Vietnam.pdf [Guignier]; Ministry of Natural Resources and Environment, “Overview on Biodiversity in Vietnam 2008”; Nagle

In 2003 the Government of Vietnam mandated the Ministry of Natural Resources and Environment to develop a biodiversity law, which was adopted in 2008 and became effective on July 1, 2009. The 2008 Biodiversity Law is Vietnam's framework legislation for biodiversity protection and governs all biodiversity-related issues (ecosystems, species and genetic resources) in Vietnam.⁴⁸¹ It is an important development in biodiversity conservation and management in Vietnam and it also provides the foundation for the development of biodiversity legislation to an independent body of law.

Objective

The scope of the regulation is established in Article 1 and implicitly clarifies that the law is applicable to all biodiversity-related activities, regardless of the specific ecosystem or sector: "This Law provides for the biodiversity conservation and sustainable development; rights and obligations of organizations, households and individuals in the biodiversity conservation and sustainable development."⁴⁸² In addition, Article 4 outlines the guiding general principles for biodiversity conservation and sustainable development and amongst others identifies conserving biodiversity as the duty of the State and all organization and individuals and highlights in-situ conservation as a keystone measure.⁴⁸³ Priority in State policy making is also given to conservation and sustainable use of biodiversity in a view to address poverty and ensure stable livelihoods.⁴⁸⁴

Principles

Chapter II of the Biodiversity Law emphasizes Biodiversity Conservation Planning with the establishment and implementation of a National Master Plan on Biodiversity Conservation. Article 9 stipulates the contents of the national master plan which includes: (1) orientation and goals on biodiversity conservation, (2) evaluation of natural and socio-economic conditions, the current status of biodiversity and resources for implementation of the plan, (3) geographic locations of biodiversity corridors, (4) ecological functions and measures of management, protection and sustainable development of ecosystems, (5) areas and types of conservations zones, (6) *ex-situ* conservation needs, (7) strategic environmental assessment of the master plan project and (8) and organizational plan for implementation.⁴⁸⁵

In line with Article 6 the prime responsibility for organizing the formulation of a National Master Plan on Biodiversity Conservation as well as guiding its implementation is assigned to the Ministry of Natural Resources and Environment, in cooperation with ministries and ministerial-level agencies. In addition, the law recognizes biodiversity planning competencies of ministries and ministerial-level agencies in their respective jurisdictions.⁴⁸⁶

2009, 228-229; PanNature, "Laws still cannot help protect the forests" (23 June 2012), online: <http://www.nature.org.vn/en/news/on-media/laws-still-cannot-help-protect-the-forests/> (accessed on 24/09/2012).

⁴⁸¹ The National Assembly of the Socialist Republic of Vietnam, Biodiversity Law No. 20/2008/QH12, Legislature XII, 4th session, 13 November 2008, available at: <http://vietnam-redd.org/Upload/CMS/Content/Library-GovernmentDocuments/20-2008-QH12.pdf>. [Biodiversity Law 2008]; Jake Brunner (IUCN), "Preparation of Vietnam's Biodiversity Law: A review", draft (August 19, 2009), unpublished. [Brunner, BL Preparation Review 2009]

⁴⁸² *Ibid*, Biodiversity Law 2008, Art 1.

⁴⁸³ *Ibid*, Biodiversity Law 2008, Art 4. See: Article 4. *Principles for the biodiversity conservation and sustainable development* 1. *Conserving biodiversity is the duty of the State and all organizations and individuals. 3. Regarding in-situ conservation as a keystone measure, combining in-situ conservation with ex-situ conservation.*

⁴⁸⁴ *Ibid*, Biodiversity Law 2008, Art 5.

⁴⁸⁵ *Ibid*, Biodiversity Law 2008, Art 9.

⁴⁸⁶ *Ibid*, Biodiversity Law 2008, Art 10.

Article 11 outlines the leading role of the Ministry of Natural Resources and Environment in implementing the National Master Plan on Biodiversity Conservation, as well as the responsibilities and competencies of ministries, ministry-level agencies and provincial-level People's Committees in their respective jurisdictions or localities. Furthermore, the National Master Plan on Biodiversity Conservation is given priority over land use planning of provinces or centrally run cities or planning of branches or domains, except defense and security planning.⁴⁸⁷ The Biodiversity Law also establishes guiding principles and procedural requirements on biodiversity conservation planning of provinces and centrally-run cities with strategic planning based in the master plan on biodiversity,⁴⁸⁸ with provincial plans to be developed through a coordinated approach followed by submission to the People's Council for publication and execution.⁴⁸⁹

In addition, the Biodiversity Law is the first Vietnamese law that provides a legal basis for implementing Payment for Ecosystem Services (PES) for all natural ecosystems,⁴⁹⁰ as well as for the establishment and management of national and provincial conservation areas. Different categories of conservation areas (national parks, nature reserves, wildlife reserve or species-habitat conservation zones, and landscape protection zones) are established with core criteria,⁴⁹¹ and introduces the concepts of zoning (strictly protected zones, ecological restoration zones and service administrative zone depending of the level of activities allowed),⁴⁹² buffers and corridors.⁴⁹³

Prior to the adoption of the Biodiversity Law categories of conservation areas were only stipulated in the Law on Forest Protection and Development, the Fisheries Law, the Law on Environmental Protection, and Decree 109/2003/ND-CP on wetlands, with different category types. In addition, the specific criteria attached to each category were only defined by regulations.⁴⁹⁴

Regarding the different types of conservation areas already set up under the Law on Forest Protection and Development and the Fisheries Law (by the Ministry of Agriculture and Rural Development) before the effective date of the Biodiversity Law, it is stipulated that that decisions on their re-establishment are not required if they satisfy the criteria for establishment of conservation areas prescribed in the Biodiversity Law.⁴⁹⁵ Lastly, as a framework law several provisions contain principles or general rules and several provisions also call specifically for additional implementation guidance by the government.⁴⁹⁶

⁴⁸⁷ *Ibid*, Biodiversity Law 2008, Art 11.

⁴⁸⁸ *Ibid*, Biodiversity Law 2008, Art 12-13.

⁴⁸⁹ *Ibid*, Biodiversity Law 2008, Art 14-15.

⁴⁹⁰ *Ibid*, Biodiversity Law 2008, Art 74; IUCN, PES in Vietnam; compare also: Patrick Maguire, "BBOP and Biodiversity Offsets in Vietnam", (4 June 2010), <http://live.katoombagroup.org/?p=702>.

⁴⁹¹ *Ibid*, Biodiversity Law 2008, Art 16-20.

⁴⁹² *Ibid*, Biodiversity Law 2008, Art 26.

⁴⁹³ *Ibid*, Biodiversity Law 2008, Art 32.

⁴⁹⁴ IDLO Country Study Vietnam; Guignier, pg. 17, 18; Vu Thu Hanh, Patricia Moore & Lucy Emerton, "Review of Laws and Policies Related to Payment for Ecosystem Services in Viet Nam" (date unknown), IUCN publication, available at: http://cmsdata.iucn.org/downloads/080310_pes_vn_legal_review_only_legal_sections_final.pdf [IUCN, PES in Vietnam].

⁴⁹⁵ *Ibid*, Biodiversity Law 2008, Art 76. Transitional provisions. 1. For national parks, nature reserves, species/habitat conservation areas, landscape conservation areas, sea conservation areas, inland water conservation areas, aquatic natural resource reserves already set up under the Law on Forest Protection and Development and the Fisheries Law before the effective date of this Law which satisfy the criteria for establishment of conservation areas prescribed in this Law, decisions on their re-establishment are not required..

⁴⁹⁶ *Ibid*, Biodiversity Law 2008, see generally Art 11(3) and Art 78.

Institutional Arrangements

State management of biodiversity is in Article 6(1). According to Article 6(2) of the Biodiversity Law, the Ministry of Natural Resources and Environment shall take responsibility within the Government for performing the state management of biodiversity. But also other ministries and ministerial-level agencies as well as the People's Committees shall perform the state management of biodiversity as assigned or decentralized by the government (Article 6(3) and (4)).

Legal and Policy Instruments/Content

Master Plan on Biodiversity

Development of a Master Plan on biodiversity provides a coordinated approach to conservation efforts harmonized at the national level and implemented concurrently at the state and local levels.⁴⁹⁷ The Master Plan provides the basis for strategies for the socio-economic development, defence and protection of the environment and land-use planning, and includes results of basic surveys on biodiversity and socio-economic conditions, implementation of previous master plans, the current status of biodiversity, and forecasts on biodiversity exploitation and use demands.⁴⁹⁸ The contents of the Master Plan are established within the Act to ensure consistency and commonality to allow for ongoing development through an iterative process.⁴⁹⁹

Survey of Natural Ecosystems

Natural ecosystems, forests, marine environments, and wetlands are to be surveyed and assessed to determine their sustainable development mechanisms.⁵⁰⁰ The results of these surveys feed into the master planning process. Further a survey of invasive alien species must be conducted to assist in the control and development of strategic responses to minimize negative impacts on biodiversity.⁵⁰¹

Environmental Impact Assessments

Owners of investment projects in buffer zones adjacent to conservation areas are required to make an environmental impact assessment report to be submitted to an evaluation council, established under the environmental protection law, for consideration. When a project poses latent risks of environmental damage, the environmental impact report must outline a safe distance so as to prevent adverse impacts to the conservation area(s) in the region.⁵⁰²

Biodiversity Reports

Biodiversity reports are to be developed as part of the national environmental report and must contain: (a) the current status and changes to major natural environments, (b) the current status, region, number and characteristics of endangered, rare and invasive alien species, (c) practical situation of biodiversity conservation including pressures and challenges to biodiversity, (d) requirements for biodiversity, (e) evaluation of the socio-economic benefits from conservation and sustainable use of biodiversity, and (f) biodiversity conservation solutions and plans.⁵⁰³

Funding

Finances supporting conservation and sustainable development

⁴⁹⁷*Ibid*, Biodiversity Law 2008, Art 12-13.

⁴⁹⁸*Ibid*, Biodiversity Law 2008, Art 8.

⁴⁹⁹*Ibid*, Biodiversity Law 2008, Art 9.

⁵⁰⁰*Ibid*, Biodiversity Law 2008, Art 34.

⁵⁰¹*Ibid*, Biodiversity Law 2008, Art 50-53.

⁵⁰²*Ibid*, Biodiversity Law 2008, Art 32(3).

⁵⁰³ *Ibid*, Biodiversity Law 2008, Art 72.

Funds for biodiversity conservation and sustainable use of biodiversity are to be allocated from the state budget, investments and contributions made by foreign organizations, and proceeds from environmental services.⁵⁰⁴ Funds allocated and collected are to be used for: (a) conducting basic research on biodiversity, (b) ecosystem restoration, (c) conservation of endangered and/or rare species, (d) investment in construction, up-grade and renovations of state-owned biodiversity facilities, (e) implementation of programs to control invasive alien species, (f) conducting inventory and management activities relating to biodiversity information, (g) developing status reports on biodiversity, (h) maintaining national lists on endangered, rare and invasive alien species, (i) managing state-owned conservation facilities, (j) conducting awareness raising and capacity building, and (k) undertaking international cooperation on biodiversity conservation and sustainable use.

Analysis and lessons learned

Successes

Two implementing decrees of the government have been adopted under the Biodiversity Law:⁵⁰⁵

1. The 2010 Decree No 65/2010/ND-CP dated 11 June 2010 on Detailing and Guiding a Number of Articles of the Biodiversity Law⁵⁰⁶ and
2. The 2010 Decree No 69/2010/ND-CP dated 21 June 2010 on Biosafety to Guide Implementation of Biosafety Articles in Biodiversity Law.⁵⁰⁷

Furthermore, the Ministry of Natural Resources and Environment is currently developing two government decrees on: (1) Sanctioning Administrative Violations to Biodiversity and (2) Management of Species in the Endangered Species Lists.⁵⁰⁸ And the Ministry is also preparing two regulations to submit to the Prime Minister for approval: (1) Regulation on Natural Conservation Areas Management and (2) Regulation on Prevention and Control of Invasive Species to 2012).⁵⁰⁹

Remaining Challenges

The 2010 Decree on Detailing and Guiding a Number of Articles of the Biodiversity Law details and guides the implementation of provisions regarding biodiversity conservation planning, conservation zones, conservation and sustainable development of organisms and conservation and sustainable development of genetic resources (Article 1). Most importantly, the Decree outlines in more detail the process to adopt and implement the National Master Plan on Biodiversity Conservation and clarifies the breakdown of competences between provincial People's Committee, the Ministry of Agriculture and Rural Development and the Ministry of Natural Resources and Environment related

⁵⁰⁴ *Ibid*, Biodiversity Law 2008, Art 73(1).

⁵⁰⁵ See section 4. Experience in Implementation and Ongoing Challenges.

⁵⁰⁶ Socialist Republic of Vietnam, the Government, Decree No. 65/2010/ND-CP of June 11, 2010, Detailing and Guiding a Number of Articles of the Biodiversity Law, available at: <http://kenfoxlaw.com/resources/legal-documents/governmental-decrees/2459-vbpl.html>.

⁵⁰⁷ Socialist Republic of Vietnam, the Government, Decree No. 69/2010/ND-CP on biosafety for genetically modified organisms, genetic specimens and products of genetically modified organisms, available at: <http://kenfoxlaw.com/resources/legal-documents/governmental-decrees/2474-vbpl.html>.

⁵⁰⁸ Compare The Government Decree 32/2006/ND-CP, dated 30th March 2006 on Management of Endangered, Precious, and rare Species of Wild Plants and Animals, adopted prior to the adoption of the Biodiversity Law: <http://www.wcs.org/publications/4931.aspx>.

⁵⁰⁹ Ministry of Natural Resources and Environment, "National Report on Biodiversity in Vietnam", 2011. The draft of the first Decree mentioned is currently available online for public comment: <http://bit.ly/voR4JN>. Compare also People and Nature Reconciliation (PanNature), Quarterly Policy Review, no. 3, 2011, available at: <http://www.nature.org.vn/en/tai-lieu/PanNature-Policy-Review-English-Q12011.pdf>. (Regarding implementing decrees as well as recent (inter) ministerial circulars). [PanNature, Quarter III/2011]

to conservation areas.⁵¹⁰ However, also after the adoption of the 2010 Decree on Detailing and Guiding a Number of Articles of the Biodiversity Law the delegation of responsibilities, in particular between the Ministry of Natural Resources and Environment and the Ministry of Agriculture and Rural Development, remains at least partly unclear or are not implemented on the ground.⁵¹¹ In addition, the intersectoral appraisal council has not been set up and also a National Master Plan on Biodiversity Conservation has not been adopted.⁵¹²

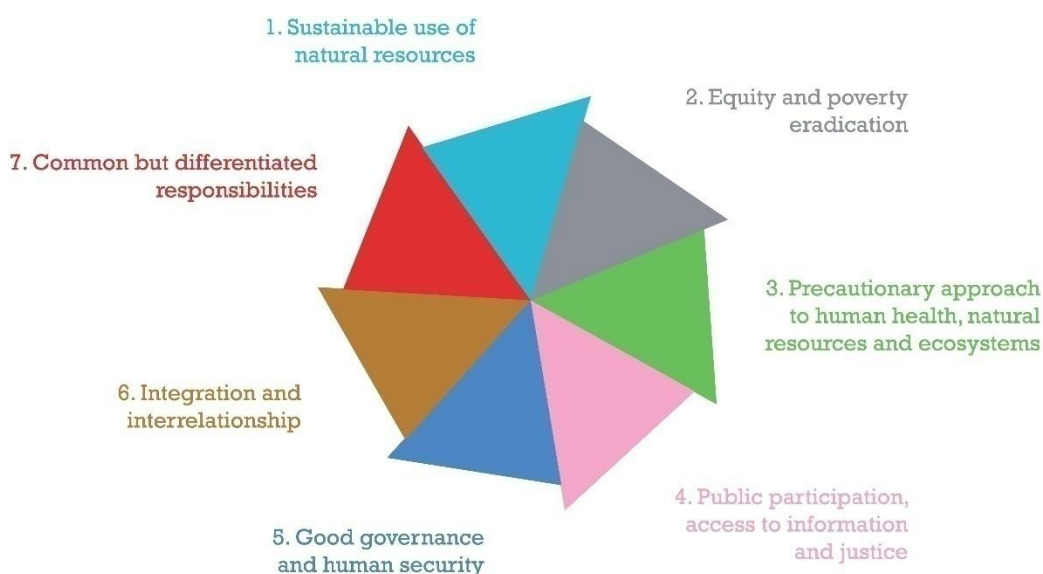
⁵¹⁰ *Supra*, Guignier, pg. 17.

⁵¹¹ LPSP, Demarcation between Ministries, 2010; “Strengthening conservation of biodiversity in the Vietnam Protected Area System: key issues to address in the governing legal, institutional, and administrative framework”, Policy Brief based on a 2011 ‘Study of the Legal, Institutional and Administrative Framework for Biodiversity Conservation in the Vietnam Protected Area System’, conducted under the project titled ‘Preservation of Biodiversity in Forest Ecosystems in Vietnam’, financed by the Deutsche Gesellschaft für Internationale Zusammenarbeit on behalf of the German Ministry of Economic Cooperation and Development, and the Vietnam Ministry of Agriculture and Rural Development. [GIZ/MARD Policy Brief, Strengthening Conservation of Biodiversity in the Vietnam PA System, 2011]

⁵¹² *Supra*, Biodiversity Law 2008, art 39.

Annex I: Guiding Principles of Sustainable Development Law

The 70th Conference of the International Law Association adopted the “New Delhi Declaration of Principles of International Law Relating to Sustainable Development” which outlined seven core principles to inform the formulation of law and policy.⁵¹³ The ILA Principles provide a cogent benchmark of important principles of international law on sustainable development. The principles, derived from the 1987 Brundtland Report⁵¹⁴ and the 1992 Rio Declaration,⁵¹⁵ were adopted by decision-makers at the 2002 World Summit on Sustainable Development (WSSD) as the central principles underpinning international treaties related to sustainable development (see figure)⁵¹⁶ and assist in focusing the attention of decision-makers on expected outcomes, governance structures and processes conducive to their effective implementation.⁵¹⁷



⁵¹³ International Law Association, “New Delhi Declaration of Principles of International Law Relating to Sustainable Development,” in *International Environmental Agreements: Policies, Law and Economics* 2, (2002) at 211-216, available at: <http://cisdl.org/tribunals/pdf/NewDelhiDeclaration.pdf>. [ILA Principles]

⁵¹⁴ United Nations, “Our Common Future: Report of the World Commission on Environment and Development” (1987), available at: http://conspect.nl/pdf/Our_Common_Future-Brundtland_Report_1987.pdf.

⁵¹⁵ United Nations, “Rio Declaration on Environment and Development” (1992), available at: <http://www.jus.uio.no/lm/environmental.development.rio.declaration.1992/portrait.a4.pdf>.

⁵¹⁶ World Future Council, “Seven principles for future just law making: How to develop policies that build future justice” available at: http://www.worldfuturecouncil.org/fileadmin/user_upload/papers/Justice_leaflet_Web_RGB_LD_-_AS.pdf.

⁵¹⁷ Maja Göpel, “Formulating Future Just Policies: Applying the Delhi Sustainable Development Law Principles” (2010) 2 Sustainability 1694. Online: www.mdpi.com/2071-1050/2/6/1694/pdf; Marie-Claire Cordonier Segger and Rajat Rana, “Selecting Best Policies and Law for Future Generations: Legal Working Paper and Worked Examples” Online: http://www.worldfuturecouncil.org/fileadmin/user_upload/papers/Best_Policy_Principles080508.pdf.

1. Sustainable use of natural resources

Article 10 of the CBD outlines the obligation for States to sustainably use their natural resources, particularly when those resources span national boundaries. Parties are obliged to: integrate consideration of conservation and sustainable use into national decision-making structures, implement measures to use biodiversity in way that minimizes adverse impacts, encourage the protection of customary forms of use of biodiversity in accordance with traditional cultural practices, provide support to local populations in the development of remedial measures to reduce the degradation of biodiversity, and encourage public private cooperation in developing methods of sustainable use of biodiversity.

2. Equity and poverty eradication

The Preamble of the CBD outlines the principle of inter-generational and intra-generational equity. While the present generation has a right to use and enjoy the use of biodiversity, it cannot be at the detriment to future generations. States are under an obligation to take into account the long-term impact of its activities and to sustain the resource base and the global environment for the benefit – in its broadest meaning – of future generations. The right to development must be implemented so as to meet developmental and environmental needs of present and future generations in a sustainable and equitable manner. This includes exercising the duty to co-operate for the eradication of poverty, as well as the duty to co-operate for global sustainable development and the attainment of equity in the development opportunities of developed and developing countries.

3. Precautionary approach to health, natural resources and ecosystems

Principle 15 of the Rio Declaration outlines the obligation to implement the precautionary approach. Where there are threats of serious or irreversible damage to human health, natural resources and ecosystems, lack of full scientific certainty is not used as a justification for postponing cost-effective preventative measures. This requires States, international organizations and non-governmental actors, in situations of scientific uncertainty, to avoid activities that may cause significant harm. It includes ensuring accountability for harm caused, planning based on clear criteria and well-defined goals, consideration of all possible means to achieve an objective when completing an environmental impact assessment, and establishing an appropriate burden of proof on the proponent of activities which may cause serious long-term or irreversible harm. Decision-making processes should always endorse a precautionary approach to risk management and the adoption of appropriate precautionary measures in particular. Precautionary measures should be based on up-to-date and independent scientific judgment and be transparent.

4. Public participation, access to information and justice

Principle 10 of the Rio Declaration emphasizes the importance of public participation, and access to information and judicial remedy. States are obliged to ensure that individuals have access to appropriate, comprehensive and timely information concerning sustainable development that is held by public authorities and the opportunity to participate in decision-making processes as well as effective access to judicial and administrative proceedings including forms of redress and remedy. It is a basic condition for responsive, transparent and accountable governments, the active engagement of civil society organizations ensuring the vital role that women have in sustainable development.

5. Good governance and human security

Principle 10 of the Rio Declaration also highlights the need for transparency in the decision-making process. The principle of good governance and human security commits States and international organizations to adopt democratic and transparent decision-making procedures and financial accountability, to take effective measures to combat official or other corruption, to respect the principle of due process in their procedures, and to observe the rule of law and human rights. Civil society and non-governmental organizations also have a right to good governance by States and international organizations, while non-state actors should be subject to internal democratic governance and to effective accountability.

6. Integration and interrelationship

Principle 4 of the Rio Declaration accentuates the importance integration and interrelationship provides to the context for international law on sustainable development by emphasizing the interdependence between economic development, social and human rights, and environmental priorities in international law. To respect this principle, States may seek to resolve overlaps or perceived conflicts between economic, social and environmental concerns either through the activation of existing institutions or the establishment of new ones that can balance the competing goals. It is essential that sustainable development be implemented at all sectors of society and governance.

7. Common but differentiated responsibilities

Principle 7 of the Rio Declaration articulates the maxim of common but differentiated responsibilities as a manifestation of general principles of equity. States and other relevant actors have a common responsibility for the achievement of global sustainable development and protection of the environment, but each stakeholder's differing circumstances must be taken into account when examining their contribution towards those goals. All States are under a duty to co-operate in the achievement of global sustainable development, with the private sector owing a further responsibility pursuant to the polluter-pays principle.

Differentiation, while principally based on the contribution that a State has made to the emergence of environmental problems, must also take into account the economic and developmental situation of the State, in recognition of the special needs and interests of developing countries and of countries with economies in transition, particularly least developed countries and those affected adversely by environmental, social and developmental considerations. Developed countries bear a special burden of responsibility in reducing and eliminating unsustainable patterns of production and consumption and in contributing to capacity-building in developing countries. In particular, developed countries should play a leading role and assume primary responsibility in matters of relevance to sustainable development.

Annex II: Analytical Framework for Decision Makers

Sustainable Use of Natural Resources	<ul style="list-style-type: none"> • Does the law/policy help to ensure that the Earth's scarce resources will be used in a more sustainable way? • Does it help to address a common concern of humankind (e.g. biodiversity)? • Does it respect natural areas, artefacts and traditional knowledge, all of which are the common heritage of humankind?
Equity and Poverty Eradication	<ul style="list-style-type: none"> • Does the law/policy help to address pressing poverty and human rights challenges? • Does it demonstrate respect among generations by including provisions that take into account the needs and aspirations of future generations of life? • Does it promote respect within the present generation of life, by promoting social justice, equity for all peoples, an end to gender discrimination, respect for the rights of indigenous peoples and local communities, eradication of poverty and less discrimination among species?
Precautionary Approach to Health, Natural Resources and Ecosystems	<ul style="list-style-type: none"> • Does the law/policy promote prevention and precaution in the face of scientific uncertainty about a threat of serious or irreversible harm? • Does it place the burden of proof for demonstrating that a project or activity is safe, or that risks are reasonable, on the proponent of the venture? • Where there is insufficient scientific evidence, does it ensure that those most affected by a project can set the acceptable level of risk or threat?
Public Participation, Access to Information and Justice	<ul style="list-style-type: none"> • Does the law/policy provide for public consultation and genuine engagement, in both its design and implementation? • Does it specifically provide for transparency and access to information for concerned citizens, local communities, and others who might be affected? • Does it provide avenues for appeal and redress for citizens, communities and others?
Good Governance and Human Security	<ul style="list-style-type: none"> • Does the law/policy establish adequate institutions to ensure transparent, prompt, effective and fair implementation of its provisions? • Does it promote peaceful resolution of conflict, and help to ensure that human beings are able to live in freedom from fear, and freedom from want? • Does the law/policy include provisions to ensure that its intentions are not thwarted by corruption, bribery or unethical conduct, and provide appropriate penalties for abuse of rights or for mis-implementation?

Integration and Interrelationship	<ul style="list-style-type: none"> • Does the law/policy integrate social justice and environmental protection into economic development plans and projects? • Does it ensure that development decision-making takes environmental and social impacts into account, providing for mitigation, modification or cancellation if necessary? • Does it provide or enhance benefits for the environment, and the society?
Common but differentiated responsibilities	<ul style="list-style-type: none"> • Does the law/policy take into account historical and other inequalities, including who has benefited from past activities and policies, when imposing obligations, and provide avenues to redress such inequalities where possible? • Is the law/policy appropriate and well-adapted to the society or region's present level of technology, scientific knowledge, human/financial resources, cultural values and traditions? • Does the law/policy avoid placing inappropriate burdens on vulnerable groups, or imposing costs on those least equipped to bear them?

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