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Towards the Aichi 2020 biodiversity targets – An assessment of Norway’s Nature Diversity Act in Light of Aichi Biodiversity Target 14

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Abstract

The Nature Diversity Act of 2009 is the most important national legal act for the protection of nature in Norway. It was adopted to allow a better follow-up of the Convention on Biological Diversity and serves to implement the constitutional provision on the right to a natural environment in which productivity and diversity are maintained. This paper reviews the Nature Diversity Act in light of Aichi Biodiversity Target 14, which requires that “By 2020, ecosystems that provide essential services [...] are restored and safeguarded, taking into account the needs of women, indigenous and local communities, and the poor and vulnerable”. This review is part of a global IDLO initiative to evaluate a number of successful national biodiversity laws. The paper concludes that the Nature Diversity Act has great potential to safeguard ecosystems that provide essential services especially through its focus on ecosystem structures, functioning, productivity; its principle on the ecosystem approach and

cumulative effects; and its provisions related to the designation of species, habitat types, and protected areas. Furthermore, the special mention of ‘Sami Culture’ under the Act may serve as a guideline to take into account the traditional agricultural and ecosystem based practices of indigenous tribes while providing for the safeguard or restoration of ecosystems that provide essential services.

Introduction

The Convention on Biological Diversity (CBD) – a multilateral agreement that entered into force in 1993 – is presently the main international treaty focusing on biodiversity conservation. In addition to conservation in itself, it includes the sustainable use of biodiversity’s components and the fair and equitable sharing of the benefits arising out of the utilization of genetic resources.² Yet despite the widespread concern around biodiversity loss, biodiversity loss continues globally, driving major alterations to earth’s ecosystems and the services they provide to humans.³ Global commitments made under the CBD to substantially reduce rates of biodiversity loss by 2010 were not met.⁴

In 2010, the CBD adopted a new Strategic Plan for 2011–2020, which included the Aichi

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² The Convention on Biological Diversity (adopted 22 May 1992, entered into force 29 December 1993) 1760 UNTS 79.

³ R. Hill et al, ‘A socio-ecological systems analysis of impediments to delivery of the Aichi 2020 targets and potentially more effective pathways to the conservation of biodiversity’, 34 *Global Environmental Change* 2015, p. 22.

⁴ *Ibid.*

Biodiversity Targets (ABTs). The Plan marks an important development towards better protection of our ecosystems, as its mission is to:

“Take effective and urgent action to halt the loss of biodiversity in order to ensure that by 2020 ecosystems are resilient and continue to provide essential services, thereby securing the planet’s variety of life, and contributing to human well-being, and poverty eradication. To ensure this, pressures on biodiversity are reduced, ecosystems are restored, biological resources are sustainably used and benefits arising out of utilization of genetic resources are shared in a fair and equitable manner; adequate financial resources are provided, capacities are enhanced, biodiversity issues and values mainstreamed, appropriate policies are effectively implemented, and decision-making is based on sound science and the precautionary approach.”⁵

The Plan presents a set of 20 interacting Aichi Biodiversity targets organized under five Strategic Goals.⁶ The 20 Aichi Targets that underpin the Strategic Goals are a step forward from the generic 2010 target of “achieving a significant reduction of the current rate of biodiversity loss”, as they are framed as a set of desired outcomes required to ultimately halt biodiversity loss and ecosystem degradation.⁷ Indeed, the goals and

targets comprise both aspirations for achievement at the global level, and a flexible framework for the establishment of national or regional targets. The Aichi 2020 Targets thus aim to halt the loss of biodiversity by 2020, in order to ensure that ecosystems continue to provide essential services. They may be considered as a blueprint for reversing biodiversity loss and ensuring the health of ecosystems for generations to come.⁸

In order to assist parties to the CBD in achieving the Aichi Targets, the International Development Law Organization (IDLO) in partnership with the Secretariat of the Convention on Biological Diversity launched an initiative in 2012 entitled ‘Legal Preparedness for Achieving the Aichi Targets’.⁹ This initiative provides a central hub for stakeholders and experts to share knowledge and build capacity, contributing to a global effort to raise understanding of “biodiversity laws” and their role in supporting countries to achieve their biodiversity goals related to the Aichi Biodiversity Targets. “Biodiversity laws” have traditionally been used for conservation purposes, focusing on the protection of plant species, wildlife and national parks. Pursuant to

could influence the achievement of the other targets. See Marques et al figure 1.

⁸ IDLO, ‘Aichi: What is legal preparedness about?’, available at <http://www.idlo.int/what-we-do/initiatives/aichi-what-legal-preparedness-about>.

⁹ The IDLO is an intergovernmental organization devoted to promoting the rule of law, with a focus on institution building, access to justice, and sustainable development. In order to realize sustainable development, the rule of law is essential. The IDLO helps to create incentives for sustainable land use, clean energy and low-carbon investment; design solutions to mitigate climate change and preserve biodiversity. The 2012 initiative falls under the ‘sustainable development’ pillar and aims to assist countries to “legally prepare” to achieve the Aichi Biodiversity Targets, a process that includes building up the locally relevant knowledge, legal capacity, and political commitment needed to empower countries to use law to achieve their broad biodiversity goals. For more information see <http://www.idlo.int/sites/default/files/pdfs/IDLO%20Leaflet%20-%20English_2.pdf>

⁵ CBD-COP, Conference of the Parties 10 Decision X/2 ‘Strategic Plan for Biodiversity 2011-2020’ (29 October 2010) UNEP/CBD/COP/10/27.

⁶ Ibid.

⁷ A. Marques et al, ‘A framework to identify enabling and urgent actions for the 2020 Aichi targets’, 15 *Basic and Applied Ecology* 2014:8, p. 633. The targets are interacting in the sense that actions to achieve one target may influence other targets; in turn a target may be influenced by actions taken towards the attainment of other targets. To determine the potential interactions among the twenty Aichi Targets, a group of 18 experts (composed of GBO-4 Technical Report authors and reviewers) qualitatively assessed how the achievement of any given Aichi Target

IDLO however, “biodiversity laws” can play a much broader role by addressing the underlying causes of biodiversity loss and mainstreaming biodiversity values across economic sectors. The creation of an enabling legal environment, underpinned by strong institutions and good governance, can be an essential step for countries to effectively achieve their biodiversity goals.¹⁰

In 2014, the IDLO carried out an assessment of a number of selected national biodiversity laws from different countries (incl. Norway, India, and Costa Rica) that could provide interesting approaches and lessons-to-learn on how national biodiversity laws could contribute to attaining Aichi biodiversity target 14 as part of Strategic Goal D: *Enhance the benefits to all from biodiversity and ecosystem services*. As a contribution to that assessment, this paper reviews Norway's Nature Diversity Act of 2009 in light of Aichi target no. 14. Target 14 requires that:

“By 2020, ecosystems that provide essential services, including services related to water, and contribute to health, livelihoods and well-being, are restored and safeguarded, taking into account the needs of women, indigenous and local communities, and the poor and vulnerable”.

The analysis of biodiversity laws in light of Target 14 thus consists of three main elements:

1. The extent to which the law places an emphasis on ecosystems that provide essential services;
2. The extent to which the law requires the restoration and safeguarding of these ecosystems that provide essential services; and
3. The extent to which the law meets the needs of women, indigenous and local communities, and the poor and vulnerable.

This paper describes the state of affairs concerning nature in Norway, assesses Norway's Nature Diversity Act in light of the above-mentioned three elements, and concludes with summing up the lessons learned.

1. Nature in Norway

Norwegian nature is very varied, with striking differences between landscapes, habitat types and plant and animal species found in different parts of the country.¹¹ The large variation over short distances is rare, not only in the Nordic context, but in a global context as well. Mainland habitats range from southern beech forests to the Arctic areas in the north, and from humid coastal areas to dry inland valleys. Norway is also known for its rich marine biodiversity.¹² In fact, the area managed within the Exclusive Economic Zone and the fisheries protection zone around Svalbard and Jan Mayen is, all together, more than five times larger than Norway's land area.¹³ This comprises the marine areas of Skagerrak, North Sea, Norwegian Sea, Barents Sea, Greenland Sea and part of the North Pole basin.

Biodiversity in Norway is mainly threatened by five direct drivers of change: land use change, over-harvesting, climate change, invasive alien species and pollution. Changing land use is the most significant factor impacting Norwegian biodiversity and has or will have a nega-

¹¹ Norwegian Ministry of Climate and Environment, 'Norway's Fifth National Report to the Convention on Biological Diversity' 2014, available at <https://www.regjeringen.no/contentassets/b760c6666be74cc3b8aa1a2ea5351a24/5nr_cbd_norway_final.pdf>

¹² Convention on Biological Diversity, “Norway-Country Profile. Biodiversity Facts. Status and trends of biodiversity, including benefits from biodiversity and ecosystem services”, available at: <http://www.cbd.int/countries/profile/default.shtml?country=no>

¹³ The Fisheries Protection Zone is a 200-nautical-mile zone of fisheries jurisdiction zone around the Svalbard archipelago. It was established on 3 June 1977 pursuant to the Act of 17 December 1976 relating to the Economic Zone of Norway.

¹⁰ IDLO (n 8)

tive impact on 87 % of the threatened and near-threatened species. Many species will however also be threatened by climate change. A warmer climate will change the living conditions for several species and ecosystems and lead to species dispersing into new areas.¹⁴ According to the Norwegian Black List, a total of 216 terrestrial and marine alien species are associated with a very high or high ecological risk.¹⁵ With regard to the marine environment, the introduction of invasive alien organisms and the spread and accumulation of persistent contaminants in food chains continue to pose significant threats to biodiversity. Climate change is believed to cause the greatest changes to marine biodiversity, as many southern species may migrate northwards due to higher sea temperatures in coastal areas. Furthermore, ocean acidification and less ice cover in the Arctic Ocean may change the living conditions for many species.¹⁶

Generally, the state of Norwegian ecosystems is relatively good and, if managed wisely, they will be capable of sustaining a flow of important ecosystem services. The administrative, economic and legal framework in Norway has been identified as an important reason for this situation.¹⁷ All Norwegian authorities, industrial sectors and other relevant actors are required to play their part in efforts to ensure the conservation and sustainable use of biodiversity. Norway has developed national environmental targets,

a national strategy and action plan which has been implemented and has shaped Norwegian environmental management.¹⁸ Many of the Aichi targets have already been included in Norway's environmental targets related to environmental status. The following national environmental targets correspond to Aichi target 14:

- The structure, functioning, productivity and diversity of marine ecosystems will be maintained or restored and they will provide a basis for value creation through the sustainable use of natural resources and ecosystem services (Target 1.1)
- All coastal waters will have good ecological and chemical status by 2021 (Target 1.2)
- By 2020, the diversity of habitat types in freshwater, forest, wetlands, mountain and in cultural landscapes will be maintained or restored; this will include safeguarding genetic diversity and important ecological functions and services (Targets 2.1., 3.1., 4.1., 5.1 and 6.5.)
- Access rights to uncultivated land will be maintained (Target 8.3)
- Towns and urban areas will be sustainable and attractive, will conform to the principles of functional design, and will promote health and a good quality of life. (Target 8.1)
- Areas of value for outdoor recreation will be safeguarded and managed in a way that maintains the natural environment. (Target 8.2)¹⁹

Milestones have already been reached towards the achievement of the 2020 Aichi Biodiversity Targets. At the end of 2013, 16.9 % of the land area of the mainland was protected under the Nature Diversity Act. Overall, the extent of protected areas covers the major ecosystems of mainland Norway reasonably well. A large proportion of the total area protected is however in

¹⁴ Convention on Biological Diversity (n 12).

¹⁵ Norway's red lists (*2010 Norwegian Red List for Species and Norwegian Red List for Ecosystems and Habitat Types*), the Norwegian Nature Index and the National Forest Inventory are the most important sources of information for assessing status and progress.

¹⁶ Convention on Biological Diversity (n 12). See also Norwegian Environment Agency, 'Nature Index for Norway 2015 (with summary in English), available at <<http://www.miljodirektoratet.no/en/News1/2015/Status-report-for-diversity-in-Norwegian-nature/>>.

¹⁷ Norwegian Ministry of Climate and Environment (n 11) p. 4.

¹⁸ Ibid p. 43.

¹⁹ Ibid p. 106.

the mountains. Further, Norway has reported 12 marine protected areas to the Convention for the Protection of the Marine Environment in the North-East Atlantic (OSPAR), covering 85 416 km² (territorial waters and Norwegian Exclusive Economic Zone). Additionally, three new MPAs (74 km²) adopted under the Nature Diversity Act have been designated.²⁰

Norway is also active in honouring the Aichi Biodiversity Targets related to the protection of traditional knowledge and the participatory management of natural resources.²¹ The Finnmark Act (2005) protects the land rights of the Sami people and establishes a consultation procedure between the Government and the Sami Parliament.²² This was followed by the "Arbediehtu" Project in 2008, which aims to develop suitable methods to record traditional knowledge and develop capacities and methods for collection of knowledge of experiences, traditions, and cultural practices in consultation with the Sami people.²³

²⁰ Ibid p. 6.

²¹ An important Norwegian source is the Commission Report 2013:10 entitled "Naturens goder – om verdier av økosystemtjenester [Nature's goods – the values of ecosystem services], which addresses the Aichi target to integrate biodiversity values into national and local development and poverty reduction strategies and planning processes and are being incorporated into national accounting, as appropriate, and reporting systems (target 2). See further: Norwegian Ministry of the Environment, 'The Government's Environmental Policy and the State of the Environment in Norway – Excerpts in English: Report No. 26 (2006-2007) to the Storting. Available at: <http://www.cbd.int/doc/world/no/no-nbsap-v3-en.pdf>. See also the Norway's National Report on Implementation of the Convention on Biological Diversity, available in English at: <http://www.cbd.int/doc/world/no/no-nr-04-en.pdf>.

²² For further reading on the consultation process see E.K. Broderstad, 'Consultations as a tool. The Finnmark Act – An example to follow?', available at <http://munin.uit.no/bitstream/handle/10037/3104/article.pdf?sequence=1>

²³ The Árbiediehtu project was one of the programmes launched in Report no. 28 (2007-2008) to the Storting on Sami policy. The project was established in 2009 to focus

2. The Nature Diversity Act

Norway's Nature Diversity Act was adopted in 2009 to promote the implementation of the objectives of the UN Convention on Biodiversity and to provide an improved legal platform to protect and manage biological diversity in Norway.²⁴ The official mandate for the drafting of the Nature Diversity Act underscored that the new framework provided by the CBD for integrated natural resource management needed to be reflected in Norwegian law.²⁵ The Nature Diversity Act also aims to implement the basic right to a natural environment whose productivity and diversity are maintained, which is laid down in the Norwegian Constitution Article 112, subject to further statutory legislation.²⁶

The Nature Diversity Act replaces the former Nature Conservation Act 1970 whose dominant function was the designation of protected areas, whilst the Nature Diversity Act provides a wider range of legal instruments to safeguard nature diversity. It contains a range of new instruments to protect species, strict conservation

on traditional Sami knowledge in Norway. The guidelines for the project are the instructions in Article 8 (j) of the Convention on Biological Diversity. For a description of the project see: <http://www.arbediehtu.no/index.php?c=7&kat=International>

²⁴ For the English translation of the Nature Diversity Act, see <https://www.regjeringen.no/en/dokumenter/nature-diversity-act/id570549/>

²⁵ Commission Report on the Nature Diversity Act: NOU 2004:28 Lov om bevaring av natur, landskap og biologisk mangfold (naturmangfoldloven), p. 57.

²⁶ Article 112 of the Constitution of Norway states that: "Every person has a right to an environment that is conducive to health and to a natural environment whose productivity and diversity are maintained. Natural resources should be managed on the basis of comprehensive long-term considerations whereby this right will be safeguarded for future generations as well. In order to safeguard their right in accordance with the foregoing paragraph, citizens are entitled to information on the state of the natural environment and on the effects of any encroachment on nature that is planned or carried out. The authorities of the State shall issue specific provisions for the implementation of these principles."

measures and principles on sustainable use of species, habitats and ecosystems. The Act also contains completely new rules on the management of alien organisms²⁷ and the management of genetic material²⁸. This latter element was included as a direct response to the rules on genetic resources in the Biodiversity Convention. The Act also contains new rules on enforcement of the Act and the imposition of sanctions²⁹, amongst which the possibility to require restoration of a particular area³⁰.

The Act is based upon an extensive commission report³¹ and a similarly extensive Government Bill³² with references to public consultations and comments to the various provisions of the Act. The responsible ministry for the Act is the Ministry of Climate and the Environment, with its subordinate Norwegian Environment Agency as an executive body.

The Act applies fully to nature on Norwegian land territory, including rivers systems, and in Norwegian territorial waters.³³ The exploitation of marine organisms, however, is dealt with in a separate act, the Marine Resources Act 2008, for which the Ministry of Industry and Fisheries is the responsible ministry.³⁴ Outside the territorial waters, on the continental shelf and in Norway's 200 miles EEZ, only a few of the

provisions apply.³⁵ These are in particular the provisions setting out the purposes and management objectives of the Act and most of the principles for public decision-making including the precautionary principle and the ecosystem approach and cumulative effects.³⁶ Except for the provisions on access to genetic material, the Act does not apply to the island group of Svalbard nor to the island of Jan Mayen, which are subject to stricter legal regimes in favour of the natural environment (respectively, the Svalbard Protection of the Environment Act 2001 and nature reserve regulations issued under the Jan Mayen Act 1930).³⁷

3. The Nature Diversity Act in light of Target 14

As mentioned above, target 14 consists of three elements. This section assesses the various measures and mechanisms of the Nature Diversity Act in light of these elements.

3.1 Introduction

The Nature Diversity Act encompasses *all living natural species and geological and landscape diversity* even where affected by human activities. It is by no means limited to the protection of vulnerable landscapes, biotopes and species by designation of specific objects (classical nature conservation) but provides legal remedies to protect biodiversity outside such designated areas and aims at sustaining the interaction between various species and with other elements of nature. Outside designated conservation areas, the Act aims at striking a balance between protection of biodiversity and human activities by promoting

²⁷ Nature Diversity Act, Article 28–31.

²⁸ Ibid, Article 57–60.

²⁹ Ibid, Article 73, 74 (which concerns environmental compensation) and 75.

³⁰ Ibid, Article 69.

³¹ Commission Report on the Nature Diversity Act: NOU 2004:28 Lov om bevaring av natur, landskap og biologisk mangfold (naturmangfoldloven), 839 pp. incl. annexes, with a summary in English at pp. 45–55.

³² Government Bill on the Nature Diversity Act: Ot.prp. no. 52 (2008-2009) Om lov om forvaltning av naturnes mangfold (naturmangfoldloven), 479 pp.

³³ Nature Diversity Act, Article 2.

³⁴ The Marine Resources Act states in Article 7 that the management of marine organisms should be based on a precautionary and ecosystem-based approach, without defining this further.

³⁵ Nature Diversity Act, Article 2.

³⁶ The articles 1, 3 to 5, 7 to 10, 14 to 16, 57 and 58, apply on the continental shelf and the economic zone of Norway to the extent they are appropriate.

³⁷ Nature Diversity Act, Article 2.

sustainable use.³⁸ The Act includes provisions on protected areas, access to genetic material, on alien species and on principles for sustainable use, both in general terms and more specifically as they relate to species and habitat types.³⁹

Various aspects of the Nature Diversity Act contribute to Aichi Target 14. Of particular importance is the overall purpose of the Act. The Nature Diversity Act aims:

“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”⁴⁰

This purpose clearly endorses the understanding that the ecosystem and its services provide the basis for human activity, culture, health and well-being. Equally important is the management objective that provides for the ecologically sustainable use of ecosystems⁴¹, and the principle on the ecosystem approach and cumulative effects⁴² that shall serve as guidelines for the exercise of public authority. Furthermore, at several instances, the Act makes important references to the protection of Sami culture.⁴³

As will be further shown below, the Na-

³⁸ Other statutory acts play an important role here. As an illustration, ecosystems are safeguarded against pollution by the Pollution Control Act 1981 which is based on a prohibition against pollution combined with a licensing system. Ecosystems providing water services are safeguarded by the Water Regulations 2006 (issued in pursuance of the Freshwater Resources Act 2000, The Pollution Control Act 1981 and the Planning and Building Act 2008) which transpose the European Water Framework Directive (directive 2000/60/EC) as included in the EEA Treaty).

³⁹ See for example, article 4 and 5; 15; 28; 33 and 47.

⁴⁰ Nature Diversity Act, Article 1.

⁴¹ Ibid, Article 4 and 5.

⁴² Ibid, Article 10.

⁴³ Ibid, Article 1, 8, 14, 41 and 43.

ture Diversity Act aims to safeguard and protect ecosystems that provide essential ecosystem services, and aims to ensure the protection of Sami culture. In certain circumstances, restoration can be required. The Nature Diversity Act not only applies to the protection of biological diversity pursuant to the Act itself, but also to the authorisation of human activities and interventions in nature under other legal acts. The Nature Diversity Act has namely a cross-sectoral effect. The general provisions⁴⁴ of the Nature Diversity Act complement sector legislation and they will influence the construction of other statutes and affect the exercise of discretionary powers. The environmental law principles, or principles for sustainable use,⁴⁵ shall “serve as guidelines for the exercise of public authority regardless of the sector legislation that applies to the case”.⁴⁶

Rules in sector legislation which go further in meeting the management aims of the Nature Diversity Act will prevail over or complement the provisions of the Nature Diversity Act. Since the Nature Diversity Act has not been accorded superior status to other statutory acts, clear provisions in sector legislation may also deviate from it by setting lower standards of protection.⁴⁷ In such a case, the preparatory works to newer acts adopted after the adoption of the Nature Diversity Act explicitly need to authorize such deviation. With regard to older acts adopted before the adoption of the Nature Diversity Act, the latter will normally prevail as being the newer act (*Lex Posterior*).⁴⁸ In general however, when a particular provision from sector legislation contains

⁴⁴ Ibid, Article 1 and 4 to 13.

⁴⁵ Ibid, Article 8–12.

⁴⁶ Ibid, Article 7. See further H.C. Bugge, *Environmental law in Norway 2011*, Kluwer Law International, p. 179.

⁴⁷ I.L. Backer, *Naturmangfoldloven. Kommentarutgave 2010* (Commentary to the Nature Diversity Act), p. 11

⁴⁸ Commission Report on the Nature Diversity Act: NOU 2004:28 Lov om bevaring av natur, landskap og biologisk mangfold (naturmangfoldloven), p. 182.

a margin of discretion,⁴⁹ for example discretion provided to pollution control authorities to decide on whether to issue a permit for an activity that may lead to pollution, the Nature Diversity Act will supplement that legislation by its rules embedded in the general provisions.⁵⁰

To illustrate, the protection of ecosystems against pollution is regulated in the Norwegian Pollution Control Act of 1981. Article 11 of the Pollution Control Act states that “The pollution control authority may on application issue a permit for any activity that may lead to pollution”, and that “When the pollution control authority decides whether a permit is to be granted and lays down conditions (...), it shall pay particular attention to any pollution-related nuisance arising from the project as compared with any other advantages and disadvantages so arising”. In the exercise of this discretion, the principles of the Nature Diversity Act have to be taken into consideration.⁵¹ The authority may issue the pollution permit after an assessment of the advantages and disadvantages of the project.

In practice, the cross-sectoral effect of the Nature Diversity Act entails that public authorities themselves implement the rules of the Nature Diversity Act when they apply the rules of sector legislation. The public authorities shall demonstrate how the principles of the Nature Diversity Act have been taken into consideration.⁵² The application of the principles may entail that a certain activity will be refused.

⁴⁹ This term should be understood here in a wide sense, so as to cover inaccurate wording of a statute as well as administrative discretion.

⁵⁰ I.L. Backer, *Naturmangfoldloven. Kommentirutgave 2010* (Commentary to the Nature Diversity Act), p. 11.

⁵¹ For an illustration of this cross-sectoral effect of the Nature Diversity Act see, F.M. Platjouw, *Environmental Law and the Ecosystem Approach: Maintaining Ecological Integrity through Consistency in Law*, Routledge 2016, chapter 7.

⁵² Nature Diversity Act, Article 7.

For instance, on October 5th 2009 the Ministry of Climate and the Environment uphold an objection against a zoning plan which was based on the construction of housing in an area where an endangered butterfly species was observed. The zoning plan was therefore refused in pursuance of Article 5, 8 and 9 of the Nature Diversity Act.⁵³ Even though the application of the precautionary principle and the requirement of a sound knowledge base in this case led to the refusal of the particular zoning plan, this does not necessarily need to be the case. At several instances, the Ministry of Climate and the Environment has also decided that even though there were tensions between the precautionary principle and a particular industrial activity, public authorities were allowed to authorize a particular activity as they deemed the benefits of this activity to be outweighing the negative effects on the environment.⁵⁴

⁵³ I.L. Backer, *Naturmangfoldloven. Kommentirutgave 2010* (Commentary to the Nature Diversity Act), p. 78.

⁵⁴ Det Kongelige Miljøverndepartement [Ministry of the Environment], *Avgjørelse i klagesak – tillatelse etter forurensningsloven i forbindelse med Det norske oljeselskap ASAs boring av letebrønn 3/4-2S Ulvetanna i Nordsjøen*, [Decision by the administrative appeal body concerning a license pursuant to the Pollution Control Act regarding drilling of well 3/4-2S Ulvetanna in the North Sea, Det norske oljeselskap ASA] 28 October 2011 (reference: 201102785-/AE). The case concerned an application for a permit in accordance with the Pollution Control Act for the exploration of oil in a different Sandeel habitat. In 2011 the NCPA had issued a permit that was appealed by the Fisheries Vessel Owners' Association. The Ministry of Climate and the Environment gave its final decision. Interestingly, the Ministry indicated that the scientific uncertainty in combination with the precautionary principle in principle should lead to the refusal of the license. However, taking into account other interests in accordance with Article 11 of the Pollution Act, the permit could nevertheless be upheld.

3.2 The emphasis on ecosystems that provide essential services

The essence of the Nature Diversity Act is the protection of natural diversity, which includes biological, landscape and geological diversity. Furthermore, the act aims to protect ecological processes.⁵⁵ Ecological processes have been defined as the total interaction between the living organisms in a habitat type and the interaction between the living and non-living nature. This interaction is a result of a number of simple functions which, for example, species or the non-living constituents have. Protecting ecological processes will contribute to maintaining nature's productivity (which is in accordance with the constitutional right to a natural environment whose productivity and diversity are maintained) and the provision of ecosystem services.⁵⁶

Despite its reference to 'ecological processes', the Act does not explicitly mention 'ecosystem services'. The overall purpose however clearly endorses the understanding that the ecosystem and its services provide a basis for human activity, culture, health and well-being. The overall purpose makes a particular reference to the culture of the Sami People and endorses that the environment provides a basis for Sami culture.

The emphasis on ecosystems further appears in the *management objectives* of the Act.⁵⁷ What is

interesting in the light of Aichi Target 14 is that the Nature Diversity Act contains a general provision that aims to maintain ecosystem structure, functioning and productivity. Importantly, this management objective to maintain ecosystem structure, functioning and productivity is an expression of the ecosystem approach. This differs from an approach that addresses primarily single species and specific elements within an ecosystem.

The management aim does not, however, apply to every single ecosystem. The second sentence contains a reasonableness criterion, which can restrict the extent to which a particular ecosystem should be maintained. It is not necessary to safeguard all ecosystems. Ecosystems are to be safeguarded at an aggregate level. Accordingly, this does not hinder the use of specific areas for other purposes such as the exploitation of petroleum or mineral resources. Using specific areas for other purposes should however not entail derogation from the management objective for ecosystems at an aggregate level. The management objective could however be achieved in a different manner or at a different pace than would have been the case if the aspect of nature conservation had been the only consideration to take.⁵⁸

In addition to the purpose and management aim of the Act that emphasizes the protection of ecosystems and ecological processes, the Nature Diversity Act contains some important environmental principles. These are, in particular, the precautionary principle, the principle on the ecosystem approach and cumulative effects, the user-pays principle, and the principle on the use of environmentally sound techniques and

tioning and productivity to the extent this is considered to be reasonable".

⁵⁸ Government Bill on the Nature Diversity Act: Ot.prp. no. 52 (2008-2009) Om lov om forvaltning av naturnes mangfold (naturmangfoldloven), p. 375.

⁵⁵ Article I of the NDA states that the overall purpose of the Act is to "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."

⁵⁶ Government Bill on the Nature Diversity Act: Ot.prp. no. 52 (2008-2009) Om lov om forvaltning av naturnes mangfold (naturmangfoldloven), p. 374–375.

⁵⁷ Article 1 of the NDA states that "The objective is to maintain the diversity of habitat types within their natural range and the species diversity and the ecological processes that are characteristic of each habitat type. The objective is also to maintain ecosystem structure, func-

methods of operation. Here two of them will be discussed. The principle on the use of the ecosystem approach and cumulative effects is a relatively novel principle in environmental decision-making in Norway and therefore interesting to shed light on. The precautionary principle is and has been widely used in decision-making on the environment. It is deemed useful to shed light on how these two principles relate to the Aichi target 14 components.

The Precautionary Principle

The precautionary principle, which may play a role for the safeguarding and restoration of ecosystems, contains two dimensions. Firstly, the principle focuses on measures which are taken to serve other purposes than environmental protection, but which may cause a risk to the environment. The precautionary principle requires that in those situations where the scientific knowledge base of the population status of species, the range and ecological status of habitat types, and the impacts of environmental pressures does not meet the requirements of a sound knowledge base, the aim shall be to avoid possible significant damage to nature diversity.⁵⁹ In practice, this requirement can be met through limitations in the permit, requiring mitigating measures, or by refusing a permit. Whether the particular damage can be classified as 'significant' will depend on several factors: to what extent the ecosystem will be changed, how permanent the changes will be,

and whether threatened or vulnerable species will be affected.⁶⁰

Secondly, the precautionary principle in the Nature Diversity Act also contains a dimension that is in line with the general understanding of the principle, namely that the principle aims to prevent that scientific uncertainty or a lack of knowledge averts states from taking environmental measures. The principle then aims to ensure that environmental measures are taken when there is a risk of serious or irreversible damage. Uncertainty about the causes or future trends may not be a reason for postponing environmental measures.⁶¹ The principle may, for instance, be of use when introducing new measures under the Nature Diversity Act such as designating new protected areas, priority species or selected habitats.

Considerable scientific uncertainty exists about the functioning and productivity of ecosystems. The precautionary principle may be important for the introduction of measures for the protection of ecosystems in the case of scientific uncertainty.

Principle on the ecosystem approach and cumulative effects

Another important principle, especially in light of Aichi Target 14, is the principle on the ecosystem approach and cumulative effects. This principle stipulates that when the effect on an ecosystem is assessed, this is to be assessed based on the cumulative effects on the ecosystem. Based on the emphasis on the ecosystem approach in this principle and the overall purpose and management objectives of the Nature Diversity Act, measures that affect a particular species or habitat will not only be assessed based on the

⁵⁹ Article 8 of the NDA requires that "Official decisions that affect biological, geological and landscape diversity shall, as far as is reasonable, be based on scientific knowledge of the population status of species, the range and ecological status of habitat types, and the impacts of environmental pressures. The knowledge required shall be in reasonable proportion to the nature of the case and the risk of damage to biological, geological and landscape diversity".

⁶⁰ I.L. Backer, *Naturmangfoldloven. Kommentirutgave 2010* (Commentary to the Nature Diversity Act), p. 96–97.

⁶¹ *Ibid* p. 98–99.

effects on this species or habitat but also based on how the surrounding ecosystem, in which the species live or of which the habitat is a part, will be affected. In reality however, knowledge about the effects on the ecosystem may be more limited than knowledge about the effects on particular affected species.⁶² In those cases it may be challenging to implement an ecosystem approach.

The requirement to assess cumulative effects has two sides. Cumulative effects firstly comprises the sum of existing effects, and secondly the sum of current and future effects. Single effects may be small and insignificant but considered against the background of already executed measures or interventions the overall load may pass a particular critical limit. Assessing the cumulative effects of measures may also prevent the gradual degradation of the environment because single measures in themselves would probably not have been halted when assessed in isolation. Measures also need to be assessed in the light of future impacts. This helps to make the precautionary principle more effective. These future impacts may stem from official decisions, but also all other impacts could be taken into consideration. Future impacts cannot be merely hypothetical however.⁶³

In 2016, the Ministry of Climate and the Environment published a revised and more comprehensive Guidance Document for the application of Chapter II of the Nature Diversity Act.⁶⁴ With regard to the assessment of past, current and future impacts, the Guidance Document specifies that past impacts often are reflected in the current status of species and habitats. For example,

if a species is endangered, this will normally be a consequence of previous impacts.⁶⁵ As a starting point, the authorities can therefore assume that past impacts are reflected in the current status of species and habitats.⁶⁶

With regard to the assessment of future impacts, the authority needs to consider pending applications for certain permits that may affect the same biodiversity. To the extent that the authority has knowledge on any plans under development or authorizations granted but not yet realized in other sectors or agencies, this shall be taken into consideration in the assessment of future impacts.⁶⁷

It is also worth mentioning that the importance of precedence in environmental decision-making might become less relevant in case the carrying capacity of certain ecosystems is reaching critical thresholds. When critical thresholds are being reached, even a small effect from a project might be too much, even though the major effects of similar projects have been accepted earlier. In such cases, precedence is not attributed particular weight.⁶⁸

The Nature Diversity Act thus in various manners requires a focus on ecosystems and ecological processes. The Act also endorses the importance of ecosystem services as a basis for human well-being. The Nature Diversity Act does however not contain a mechanism to identify ecosystems that provide *essential* services. The choice on which ecosystems to safeguard is mainly regarded as a political choice, informed by the scientific knowledge available with regard to the status of the particular ecosystem.⁶⁹

⁶² Ibid p. 100–101.

⁶³ Ibid.

⁶⁴ Miljøverndepartementet [Ministry of the Environment], *Veileder Naturmangfoldloven kapittel II. Alminnelige bestemmelser om bærekraftig bruk* [Guidelines to the Nature Diversity Act. Chapter II General Provisions on Sustainable Use] (March 2016). An earlier version (a practical introduction) was published in 2012.

⁶⁵ Ibid p. 60.

⁶⁶ There are exceptions however, see the Guidance Document, p. 60.

⁶⁷ Ibid p. 60.

⁶⁸ Ibid p. 61.

⁶⁹ Norway's Fifth National Report to the Convention on Biological Diversity' 2014 mentions the Norwegian Nature Index and the National Forest Inventory are the most

3.3 The restoration and safeguarding of ecosystems that provide essential services

The second element of Aichi Target 14 is that the law regulates the restoration and safeguarding of ecosystems that provide essential services. To what extent the Nature Diversity Act meets that criterion will be discussed in this section. As will be shown, the Nature Diversity Act regulates both the safeguarding and restoration of ecosystems.

Safeguarding

As outlined above, the aspect of safeguarding ecosystems appears at various instances of the Act. The overall purpose, the management aim, the principle on the ecosystem approach and cumulative effects, and the precautionary principle, all support the safeguarding of ecosystems. Particular measures that could be adopted for the safeguarding of ecosystems are the designation of priority species and the adoption of management measures for the conservation of these species.⁷⁰

Regulations governing priority species made under Article 23 (1) may (a) prohibit any form of removal of, damage to or destruction of a priority species or specific populations of the species, [...] (b) make provisions regarding the protection of certain types of areas of limited extent with specific ecological functions for the species [...], c) require clarification of the impacts of any works planned in areas with specific ecological functions for the species concerned, including the identification of alternative areas that may

be used to ensure the conservation of the species in accordance with Article 5(1).⁷¹

If provisions are made regarding the protection of certain types of areas with specific ecological functions for priority species under the first paragraph (b) in cases where active management or other types of measures are essential to safeguarding the area, the state shall present an action plan to protect such areas. The public authorities may enter into further agreement with the landowner or the rights holder regarding management of an area with specific ecological functions for priority species.⁷²

The competent authority under the Act may grant exemptions from regulations made under Article 23 if this does not result in the deterioration of the species' population status or trend, or if significant public interests make it necessary.⁷³

It may also be necessary to protect certain types of areas with specific ecological functions for these priority species.⁷⁴ Article 34 concerning protected areas requires that "regulations describe the purpose of protecting the area, including the natural and cultural qualities such protection is intended to safeguard and the state that protection is intended to achieve, the limits of the protected area, affected properties and provisions regarding use of the area."⁷⁵ In the context of marine protected areas, it needs to be stated whether the purpose of protection applies to the seabed, the water column, water surface or a combination of these.⁷⁶ The geographical extent of the protected area shall be consistent with the purpose of protection. In determining the limits of the protected area, importance shall be attached to safeguarding ecological functions

important sources of information for assessing status and progress. Norwegian Ministry of Climate and Environment, 'Norway's Fifth National Report to the Convention on Biological Diversity' 2014, available at <https://www.regjeringen.no/contentassets/b760c6666be74cc3b8aa1a2ea5351a24/5nr_cbd_norway_final.pdf>

⁷⁰ Nature Diversity Act, Article 23 and 24.

⁷¹ *Ibid*, Article 24.

⁷² *Ibid*.

⁷³ *Ibid*.

⁷⁴ *Ibid*, Article 23 and 24.

⁷⁵ *Ibid*, Article 34.

⁷⁶ *Ibid*.

of significance for achieving the purpose of protection and the resilience of the ecosystem to external pressures.⁷⁷

As mentioned above, a considerable percentage of land area has been designated as protected area. In addition, a relatively large proportion of the area of wetlands in Norway, about 18 % of the total, is protected under the Nature Diversity Act. By January 2014, about 2.5 % of all productive forest in Norway was protected under the Nature Diversity Act.⁷⁸

The Act makes it possible to tailor the use of instruments to the status of a particular species, habitat type or ecosystem, to the relevant pressures or threats in a specific case, or to find a balance between environmental considerations and other public interests. The provisions on protected areas and priority species are intended to be used for distinctive or representative areas and for threatened or particularly valuable species or habitats, and in cases where Norway has international responsibilities. Once it has been decided to establish a protected area or designate a priority species, the environmental authorities and local management boards are responsible for their management.⁷⁹

Pursuant to Article 35 and 37, it is also possible to designate 'national parks' and/or 'nature reserves'. According to Article 37 of the Nature Diversity Act, within a nature reserve no activity is allowed that 'reduces the conservation value of the area as described in the purpose of protection'. Nature reserves are generally subject to stricter regulations than national parks. Article 37 states that nature reserves 'may be given absolute protection from all activity, projects and access or passage'. It is also possible to estab-

lish interference-free areas in 'wilderness' areas where no major infrastructure exists.⁸⁰

Outside of protected areas, the Nature Diversity Act not only aims at the conservation and safeguarding of nature, but it also aims at sustainable use. 'Sustainable use' refers to ecological sustainable use which meets the general management objectives for habitat types, ecosystems and species.⁸¹ So use of the ecosystem should occur within the boundaries of its productivity and capacity for self-renewal.

It is possible to designate selected habitat types under the Nature Diversity Act pursuant to Article 52. This is a less strict designation than the establishment of protected areas and is intended to safeguard habitat types through sustainable use rather than protection and to ensure that existing instruments are used across sectors to safeguard areas of great value to biodiversity.⁸² When a habitat type is selected for which active management or other types of measures are essential to the maintenance of the habitat type, the state shall present an action plan to safeguard the habitat type.⁸³

The Nature Diversity Act thus allows the safeguarding of ecosystems to be balanced with other interests or concerns. Of importance with respect to concrete situations is that when decisions have to be made also other considerations than those mentioned in the overall purpose can be taken into account. Therefore, the provision

⁸⁰ For a more comprehensive review on wilderness protection in Norway (and the establishment and management of national parks, nature reserves of interference-free areas) see O.K. Fauchald, *Wilderness Protection in Norway, Wilderness Protection in Europe. The Role of International, European and National Law*, Cambridge 2016, 386–408.

⁸¹ As referred to in Article 4 and 5 of the NDA. See I.L. Backer, *Naturmangfoldloven. Kommentarutgave 2010* (Commentary to the Nature Diversity Act), p. 21.

⁸² Norway's Fifth National Report to the Convention on Biological Diversity' (n 11), p. 53.

⁸³ Ibid.

⁷⁷ Ibid.

⁷⁸ Norway's Fifth National Report to the Convention on Biological Diversity' 2014, (n 11), p. 101–103.

⁷⁹ Ibid p. 53.

on the overall purpose is considered to be non-exhaustive as regards the relevant (permissible) arguments in decision-making. The need for balancing is also underscored in another provision of the Nature Diversity Act, which states that measures under the Act shall be weighed against other important public interests.⁸⁴ These public interests may consist of economic, social and cultural needs in addition to the need of effective resource management.⁸⁵

The need to balance the aim of the safeguarding of ecosystems with other interests and concerns also follows from the nature of the management objectives and the environmental principles of the Act. As an illustration, the maintenance of ecosystem structure, functioning and productivity as embedded in the management aim of the NDA applies on an overarching level. It is of importance for the interpretation and the exercise of administrative discretion pursuant to the Nature Diversity Act and other statutory acts.⁸⁶ Administrative bodies should in principle prevent the taking of decisions that would complicate the achievement of this overall management aim which is an objective against which to measure the aggregate of the decisions made.⁸⁷

⁸⁴ Nature Diversity Act, Article 12, first subsection, NDA. Article 14.1 only applies to decisions taken in accordance with the Nature Diversity Act and not to decisions which are based on any other legislation. Article 14.1 was inserted to remove a fear that other than environmental considerations could be left completely out of scope in decision-making under the NDA.

⁸⁵ Government Bill on the Nature Diversity Act: Ot.prp. no. 52 (2008-2009) Om lov om forvaltning av naturnes mangfold (naturmangfoldloven), p. 383–384.

⁸⁶ Ibid p.81 and 373.

⁸⁷ I.L. Backer, *Naturmangfoldloven. Kommentarutgave 2010* (Commentary to the Nature Diversity Act), p.71. In this respect, an important role is also being played by the Office of the Auditor General of Norway, which undertakes performance auditing resulting in reports to the Norwegian Parliament. A performance audit in this field could highlight to which extent the management objectives of NDA are fulfilled. See, in particular, Document no. 3:12 (2005-2006) (in English) on the investigation of

In practice, the interpretation and application of provisions from sector legislation have to be carried out in light of the management objectives for habitat types, ecosystems and species.⁸⁸ However, other management objectives that follow from sector legislation itself may be decisive in specific decisions. The preparatory works to the Nature Diversity Act states that in general the management objectives have to be ‘kept in mind’ so that those decisions would not complicate the achievement of those objectives.⁸⁹

The 2016 Guidance Document on the application of Chapter II of the Nature Diversity Act⁹⁰ specifies that the management objectives are of particular relevance when decisions affect endangered species and habitat types. The more these species or habitat types will be affected by a measure, the more likely it will conflict with the overall management objectives. In the case of small hydropower plants for instance, power plants that affect critically endangered or endangered species, are not guaranteed a concession.⁹¹

It is necessary to assess the cumulative effects of measures. If one has reached or is approaching the limit of what a species or a habitat type can endure and measures will further reduce the population of the species or habitat type, this should be a very weighty factor in the

the authorities’ efforts to survey and monitor biological diversity and to manage protected areas and Document no. 3:11 (2006-2007) (in English) on the investigation of sustainable land use planning and land use.

⁸⁸ Government Bill on the Nature Diversity Act: Ot.prp. no. 52 (2008-2009) Om lov om forvaltning av naturnes mangfold (naturmangfoldloven), p. 373–374 og 375.

⁸⁹ I.L. Backer, *Naturmangfoldloven. Kommentarutgave 2010* (Commentary to the Nature Diversity Act), p. 69

⁹⁰ Miljøverndepartementet [Ministry of the Environment], *Veileder Naturmangfoldloven kapittel II. Alminnelige bestemmelser om bærekraftig bruk* [Guidelines to the Nature Diversity Act. Chapter II General Provisions on Sustainable Use] (March 2016). An earlier version (a practical introduction) was published in 2012.

⁹¹ Ibid p. 9.

assessment of whether a measure should be implemented or not.⁹²

In administrative practice, the reasons given by the public authority for its decision in accordance with general principles of administrative law, usually make a reference to the relevant principles of sustainable use, amongst which the precautionary principle and the ecosystem approach, indicating how they have been applied, but it varies to what extent this is elaborated on. In many cases, projects are adopted, possibly with certain modifications due to the principles and management objectives of NDA. It has however also occurred that for the sake of preserving biological diversity, a plan for a new road or new housing area has been rejected by virtue of the said principles.⁹³

A recent review of the application of the Nature Diversity Act by the municipalities concludes that although the legislation is widely and frequently used, it is uncertain what effect this has had on the decisions that are taken. An evaluation of the effects is therefore in progress.⁹⁴

So, even though the Nature Diversity Act contributes to the safeguarding of ecosystems, the Act also explicitly enables this aim to be balanced against the sustainable use of nature particularly outside of protected areas. The balancing assessment and the decision on the extent to which certain ecosystems are to be safeguarded are ultimately decided by public authorities on a case-by-case base. The management objectives in the Nature Diversity Act have no higher rank than other laws, and the administrative

authority responsible may deem to the needs for implementing a measure so strong that the measure should be allowed even if it makes it more difficult to achieve the overall management goals.⁹⁵ The overall management goals have to be considered in light of Article 112 of the Norwegian Constitution however.⁹⁶

Restoration

The aspect of restoration is also regulated in the Nature Diversity Act. Restoration can be required in the context of protected areas. Active restoration measures may be required when establishing an area as a nature reserve or for the protection of habitat management areas.⁹⁷ In addition, administrative authorities have certain powers to carry out measures to maintain or achieve the state of the natural or cultural environment that is the purpose of the protection, including restorative measures after works affecting the natural environment.⁹⁸ Restoration orders may also be issued after unlawful activities⁹⁹ and even in the case of unforeseen environmental degradation after a lawful activity.¹⁰⁰ The precautionary principle may be invoked to support the restoration of a damaged ecosystem where the damage creates a risk of further deterioration of the ecosystem.¹⁰¹

Until now, restoration of ecosystems has been of minor importance in Norway, which has much larger areas of relatively undisturbed nature than more densely populated and heavily

⁹² Ibid p. 10.

⁹³ Two cases of this kind (concerning the eagle owl and a butterfly species) are reported in I.L. Backer, *Naturmangfoldloven. Kommentanutgave 2010* (Commentary to the Nature Diversity Act), p. 78.

⁹⁴ Andersen, O., Bay-Larsen, I., Øian, H. & Fangel, K. 2013. The Norwegian Biodiversity Act. The municipalities experiences with the implementation of the Biodiversity Act. – NINA Report 964: 63 pp.

⁹⁵ Miljøverndepartementet [Ministry of the Environment], *Veileder Naturmangfoldloven kapittel II. Alminnelige bestemmelser om bærekraftig bruk* [Guidelines to the Nature Diversity Act. Chapter II General Provisions on Sustainable Use] (March 2016), p. 8.

⁹⁶ See n 26.

⁹⁷ Nature Diversity Act, Article 37 and 38.

⁹⁸ Ibid, Article 47.

⁹⁹ Ibid, Article 69.

¹⁰⁰ Ibid, Article 70.

¹⁰¹ In particular by issuing an order under NDA, Article 69 or 70.

industrialized countries. However, ecosystem restoration is becoming more important in Norway too, partly in response to Aichi target 15¹⁰². Norway is currently working on the realization of the 15 % restoration target. Maintenance of healthy and intact ecosystems is considered to be essential for ecosystem resilience. The Norwegian Nature Index, which has been developed to provide an overview of the state of and trends in biodiversity in the major ecosystems in Norway, will help to quantify ecosystem intactness.¹⁰³

In 2013, the Nordic Council of Ministers started a project on ecological restoration designed to help achieve Aichi target 15. Norway, Sweden, Finland, Denmark, Iceland and Estonia are participants in this project. The countries will first map the status of their ecosystems and then use the four-level model of degradation developed by the EU to draw up a restoration plan. The model is to be used as a basis for setting targets and proposing specific restoration projects. The countries are required to set priorities and assess how much realistically can be done given different time limits and cost ceilings.¹⁰⁴

More specifically in the context of wetlands, Norway has set a national goal to restore at least half of the wetlands that have been damaged by 2020. At the request of the Ministry of Climate and Environment, the Norwegian Environment Agency has drawn up a four-year plan for wetland restoration, giving priority to wetlands within existing protected areas. The plan iden-

tifies the 10 highest-priority localities. It covers the period 2014–18, and implementation has begun.¹⁰⁵

3.4 The needs of women, indigenous and local communities, and the poor and vulnerable

The third element of Aichi Target 14 is that the law should ensure the taking into account of the needs of women, indigenous and local communities, and the poor and vulnerable. Frankly, to what extent these groups of people actually need protection might differ widely taking into account social and economic circumstances. Obviously, these may vary for different parts of the world. Though the Nature Diversity Act does not aim at meeting the needs of women and the poor in particular, the Nature Diversity Act places particular emphasis on the protection of the culture of Sami people. The Sami people are an indigenous group of people which is protected by the UN Convention on Civil and Political Rights¹⁰⁶ and the ILO-Convention on Indigenous and Tribal Peoples.¹⁰⁷ The Sami are particularly protected through the 2005 Finnmark Act.¹⁰⁸

¹⁰⁵ Ibid p. 108.

¹⁰⁶ Article 27 UNCCPR.

¹⁰⁷ Convention No. 169 of 1989 on Indigenous and Tribal Peoples.

¹⁰⁸ The background for the Finnmark Act is the Sámi people's fight for their rights to manage their land and culture. In 1978, the Norwegian Water Resources and Energy Directorate published a plan that called for the construction of a dam and hydroelectric power plant that would create an artificial lake and inundate the Sami village of Máze. This plan was met by a strong opposition from the Sámi, and resulted in the Alta controversy. As a result of the controversy, the Norwegian government held meetings in 1980 and 1981 with a Sámi delegation appointed by the Norwegian Sámi Association, the Sámi Reindeer Herders' Association of Norway and the Norwegian Sámi Council. The meetings resulted in the establishment of the Sámi Rights Committee addressing Sámi legal relations, which proposed among other things establishing the Sami Parliament, and finally the adop-

¹⁰² Aichi target 15 stipulates that "By 2020, ecosystem resilience and the contribution of biodiversity to carbon stocks has been enhanced, through conservation and restoration, including restoration of at least 15 per cent of degraded ecosystems, thereby contributing to climate change mitigation and adaptation and to combating desertification".

¹⁰³ Norway's Fifth National Report to the Convention on Biological Diversity' 2014, (n 11) p. 108.

¹⁰⁴ Ibid p. 108–109.

The essence of the Finnmark Act is that the Sámis, through protracted traditional use of the land and water areas, have acquired individual and/or collective ownership and right to use lands and waters in Finnmark County.¹⁰⁹ The Finnmark Act attempts to strengthen the Sámi rights, by giving the entire population of Finnmark greater influence of the property in the county. However, the act does not cover fishing rights in saltwater, mining, or oil rights.¹¹⁰

This status of the Sami people has had an important effect on the Committee that drafted the Nature Diversity Act. Already in the overall purpose of the Act it is acknowledged that the environment provides a basis for Sami culture. Moreover, the Act stipulates that when decisions are made that directly affect Sami interests, due importance shall be attached to the natural resource base for Sami culture.¹¹¹ Public authorities, when making decisions, have to attach importance to knowledge that is based on many generations of experience acquired through the use of and interaction with the natural environment, including traditional Sami use, and that can promote the conservation and sustainable use of biological, geological, and landscape diversity.¹¹²

When establishing protected areas, for instance, the Nature Diversity Act also contains specific requirements for the inclusion of Sami cultural and business interests and the Sami Parliament in the context of administrative procedures and consultations regarding proposals for protection regulations.¹¹³ The Finnmark Act,

as presented above, regulates in more detail the rights of the Sami people in particular situations such as expropriation cases and compensatory measures.

4. To sum up

The Nature Diversity Act of 2009 is the most important national legal act for the protection of nature in Norway. It was adopted to allow a better follow-up of the Biodiversity Convention 1992, and serves to implement the constitutional provision on the right to a natural environment in which productivity and diversity are maintained. The overall purpose of the Act includes the conservation of ecological processes and implicitly underscores the importance of ecosystem services for human well-being. Furthermore, the maintenance of ecosystem structure, functioning or productivity is part of the management objectives of the Act. Another important novelty of the Act is its principle on the ecosystem approach and cumulative effects. The Nature Diversity Act is a cross-sectoral act for which principles for public decision-making – including the precautionary principle, and the principle on the ecosystem approach and cumulative effects – have to be taken into account by all sectoral authorities when they apply their sectoral legislation.

The Nature Diversity Act has great potential to safeguard essential ecosystem services especially through its focus on ecosystem structures, functioning, productivity, and its principle on the ecosystem approach. Also the precautionary principle may play an important role for the safeguarding of ecosystems as it may provide for adopting measures that are helpful in preventing a potential damage to the environment. In addition, the objective of the Act and its role in the protection of 'Sami culture' can be linked to an important aspect of Aichi Target 14, namely the focus on "the needs of women, indigenous and local communities".

tion of the Finnmark Act in 2005. For further reading, see <<http://www.galdu.no/home.347689.en.html>>

¹⁰⁹ Article 5 of the 2005 Finnmark Act.

¹¹⁰ *Ibid.*

¹¹¹ Nature Diversity Act, Article 14, second subsection.

¹¹² *Ibid.*, Article 8.

¹¹³ *Ibid.*, Article 41 and 43. See further the Commission Report on the Nature Diversity Act: NOU 2004:28 Lov om bevaring av natur, landskap og biologisk mangfold (naturmangfoldloven), pp. 462–488.

At present, the principles of the NDA, such as the precautionary principle and the principle on the ecosystem approach and the cumulative effects, are supposed to be applied by all sectors of governance. Through the application of these principles there will be an increased focus on ecosystems. In practice however, due to limits to scientific knowledge, decisions are based more on the assessment of cumulative effects (of human activities) on particular species or habitats, than on assessments of cumulative effects on ecological processes, ecosystems functions, processes or productivity.

Furthermore, even though the Nature Diversity Act has potential to ensure the safeguarding of essential ecosystems, this is not necessarily ensured. The Nature Diversity Act allows for the balancing of interests. The aim of safeguarding ecosystems becomes part of a balancing assessment where other interests and aims also come into play. Sectoral statutory acts play an important role for the protection of ecosystems in Norway. Though the principles and management objectives of the NDA are taken into consideration while public authorities apply their sectoral legislation, administrative discretion in these sectoral statutory acts to weigh and balance divergent interests has an effect on the aim to ensure the safeguarding of ecosystems. The safeguarding of ecosystems that provide essential services therefore depends on the Nature Diversity Act in combination with the application and implementation of other statutory acts.

In short, legal instruments such as the Norwegian Nature Diversity Act could contribute to achieving the three elements of Aichi Biodiver-

sity Target 14. The Act, through its cross-sectoral effect, could effectively ensure that the aim of safeguarding ecosystems would be taken into consideration in all decisions taken by public authorities across sectors. The safeguarding of ecosystems would however be more effectively ensured in a legal system where the margin of discretion in sectoral substantive legislation is more limited and where the aims and objectives of the Nature Diversity Act become less subject to weighing and balancing assessments pursuant to sectoral legislation.

Key lessons learned

- The Nature Diversity Act underscores the importance of conserving ecosystem structures, functioning and productivity.
- The principle on the ecosystem approach and cumulative effects could be helpful in safeguarding ecosystems that may be under potential threat due to a number of developmental projects.
- The Act does make important references to the protection of Sami culture, which is an indigenous group of people living in Scandinavia.
- The cross-sectoral effect of the Act ensures that its principles are being taken into account across all sectors in accordance with the principle of environmental policy integration.
- The provisions that refer to ecosystem processes; ecosystem structure, functioning or productivity; or the ecosystem approach, are prescriptive in nature. Sectoral authorities have discretion to give overriding weight to other interests or values.