

Minister of the Environment and International Development Erik Solheim

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Appointment of a committee to review the values related to ecosystem services in Norway

1. Introduction

At a government conference on 10 March 2011, the Norwegian Government decided to establish an official committee to review the values related to ecosystem services in Norway. Its task will be to look at ways of enhancing knowledge about the values associated with biodiversity and ecosystem services in order to improve the basis for decision making, and to propose methods of assessing and valuing the impacts of changes in biodiversity and ecosystem services on human well-being and the quality of life. The committee will also be asked to propose ways of estimating or calculating these values as part of Norway's national wealth. Its proposals should not include specific guidelines for the types of statistics to be prepared or how the national accounts should be organised.

This work is a follow-up of the following paragraph from the white paper on the 2011 national budget (Meld. St. 1 (2010–2011)): *“The Economics of Ecosystems and Biodiversity (TEEB) study is seeking to identify and demonstrate the values provided by biodiversity and the losses to society when biodiversity is lost. The final report of the study is to be presented in October 2010. The study is clarifying the concept of natural capital. There are plans for Norway to follow up the study at national level.”*

The final version of the mandate, as agreed in consultation with relevant ministries and in accordance with the conclusions of the government conference on 10 March, is attached to this document.

2. Background and terms of reference

“Ecosystem services” is a generic term for all the services provided by nature, which we depend on for our well-being and quality of life. Like all other countries, Norway relies on resilient ecosystems and well-functioning ecosystem services, among other things for stable primary production, water security and clean water, and reducing vulnerability to climate change.

Ecosystem services include both traditional goods provided by nature (food, fibres, fuel), which have market prices, and public goods that are not traded in markets. Public goods do not generally have market prices, despite their great value to society. At present, neither company nor national accounts explicitly include the benefits society derives from ecosystem services or the costs to the economy and our well-being of degradation of these services. This economic invisibility and the use of inappropriate policy incentives can mean that there is a risk that we will overexploit ecosystems without knowing what we are losing.

Identifying and surveying ecosystem services and the links to our well-being and the quality of life, communicating relevant information, and developing systematic reporting systems is pioneering work. Contact should be established with countries such as Germany, the Netherlands, the UK, Brazil and India, which have all started similar national initiatives to follow up the TEEB study. It will also be important to make use of experience from the World Bank project Wealth Accounting and Valuation of Ecosystem Services (WAVES), where Norway is to be one of several pilot countries, and from other international action to follow up TEEB.

The committee will be assigned the following tasks:

- Review the TEEB study reports and assess which elements are particularly relevant to Norway.
- On the basis of the terms and definitions used in the TEEB study, clarify and elaborate when and how key concepts related to the importance of ecosystem services for human well-being and for value creation can be applied in Norwegian policy.
- Draw up an overview of, assess and present what is known about the values of biodiversity and ecosystem services for Norwegian society today and for future generations. The committee should focus particularly on methods of evaluating the consequences of depletion of ecosystem services and of valuing the depletion of important ecosystem services that are declining or under severe pressure, the main reasons for such decline, and the costs associated with depletion of or damage to ecosystems. The committee will also be asked to review different ways of valuing and of demonstrating and raising awareness of ecosystem services, and to assess the advantages and disadvantages of and the potential for a stronger focus on economic values and valuation in monetary terms.
- Look at whether current decision-making mechanisms in different sectors of society act as barriers to the maintenance of important values associated with ecosystems. In this context, barriers are primarily methodological problems, gaps in our knowledge, the economic invisibility of ecosystem services, and a lack of incentives to take the costs of using ecosystem services into account.
- Evaluate how knowledge of biodiversity and ecosystem services can be enhanced in order to improve the basis for decision making, for example using descriptions, statistics, indicators and measurements of the value of biodiversity and ecosystem services, and make proposals for how these values can be estimated as part of Norway's national wealth. The committee should not propose specific guidelines for the types of statistics to be prepared or how the national account should be organised.

The Ministry of the Environment

recommends

the appointment of a committee to review the values related to ecosystem services in Norway. The terms of reference for the committee should be in line with the attached proposal. The deadline for publication of the committee's report is 31 August 2013.

Appendix to the Royal Decree on the appointment of a committee to review the values related to ecosystem services in Norway

1. Terms of reference of the committee

The Economics of Ecosystems and Biodiversity (TEEB) study has enhanced knowledge about and awareness of the values provided by ecosystem services. This is clearly reflected in decisions taken by the Conference of the Parties to the Convention on Biological Diversity in autumn 2010.

At national level, Norway needs a better overview of ecosystem services and their importance for economic development and human well-being in the long term, and also the possible impacts of the loss and degradation of ecosystems.

Norwegian follow up of the TEEB study is one way of meeting Norway's commitments under the UN Convention on Biological Diversity (CBD). The CBD's *Strategic Plan for Biodiversity 2011–2020* includes the following target: *“By 2020, at the latest, biodiversity values have been integrated into national and local development and poverty reduction strategies and planning processes and are being incorporated into national accounting, as appropriate, and reporting systems.”*

The committee is particularly tasked with examining the following:

Approach and concepts

The committee will base its work on the conclusions and recommendations of The Economics of Ecosystems and Biodiversity (TEEB) study, and assess which elements and recommendations are particularly relevant to Norway.

The committee will evaluate the approach and concepts used by TEEB, and among other things discuss relationships between the term “ecosystem services” and other terms used to describe nature (“biodiversity”, “natural capital”, “ecological infrastructure”, etc).

Description of the values related to biodiversity and ecosystem services

The committee will describe the state of and trends for biodiversity and ecosystem services in Norway, and identify ecosystems that are under pressure or declining and the main reasons for this situation. Using this as a basis, the committee will indicate the ecosystem services that are at risk of degradation and estimate the benefits that will be lost in the short and the long term. The committee will evaluate whether it will be possible to rectify this damage, and estimate the costs of doing so. The committee should focus particularly on ecosystem services that will be important in dealing with climate change and expected changes in land use (cf ecological infrastructure). The committee will review and assess existing reports on biodiversity and the values associated with ecosystem services in Norway, and reports from nearby geographical areas and/or areas with a similar environment.

The committee will review different ways of measuring and demonstrating the values related to ecosystem services, and assess the advantages and disadvantages of and the potential for valuation in monetary terms.

Improving the basis for decision-making and decision-making processes, and making more effective use of policy instruments

Two very important elements of the TEEB approach are how to improve knowledge of the importance and value of ecosystem services and how this knowledge can be better integrated into all relevant decision-making processes. The committee will identify needs for better statistics and indicators relating to ecosystem services in Norway. Furthermore, it will identify how relevant knowledge best can be communicated to decision-makers at all levels – nationally, in local communities, and in the business sector. Experience gained from the World Bank project Wealth Accounting and Valuation of Ecosystem Services (WAVES) will be particularly relevant. Moreover, the TEEB study recommends ways of ensuring that the importance of nature and ecosystem services for human well-being is more fully reflected in decision-making.

The committee will review and evaluate different valuation methods and measurement tools, and make recommendations on their use in Norway.

The committee will review and evaluate how the importance of biodiversity and ecosystem services for human well-being can be better reflected in policies and decision making, on the basis of existing descriptions, statistics and indicators. Its proposals should not include specific guidelines for how the national accounts should be organised.

The committee will look at the current public administration set-up to identify any barriers to the maintenance of important values associated with ecosystems, and make recommendations for how ecosystem services can be taken more fully into account in private and public decision-making. The committee will also assess whether the current incentive structure provides strong enough motivation to take into account the economic costs of using ecosystem services, and if appropriate propose ways of remedying the situation.

Other guidelines

In its deliberations, the committee should consider relevant proposals in Official Norwegian Report NOU 2009:16 *Globale miljøutfordringer – norsk politikk* (Global environmental challenges – Norwegian policy).

The committee will evaluate the need for further knowledge development as regards biodiversity in Norway. In assessing what is already known and further needs, the committee should also consider relevant proposals in Official Norwegian Report NOU 2010:10 *Tilpassing til eit klima i endring* (Adapting to a changing climate), particularly Chapters 1.2 and 7, which include a number of recommendations for improving knowledge of ecosystem functioning.

The committee should also make use of *Veileder i samfunnsøkonomiske analyser* (guidelines for economic analyses published by the Ministry of Finance), see Chapter 6 on valuing goods that are not traded in markets.

The committee should maintain contact with the expert committee appointed to review the Ministry of Finance's guidelines for economic analyses, in order to identify any issues that concern both committees.

The committee will assess the economic and administrative consequences and other important consequences of its proposals, as set out in the *Instructions for Official Studies and Reports*. At least one of its proposals must be possible to implement within the current economic framework.

2. Organisation of the work

Work on ecosystem services and their economic implications requires experience and expertise in both ecology and economics, and also knowledge of decision-making processes in the public sector and how different sectors use and depend on ecosystem services. The committee proposed by the Ministry thus includes twelve members with a wide range of expertise. They have been selected on the basis of their expertise, experience and contacts within research, the public administration and the business sector, and not as representatives of specific sectors, interest groups or authorities. In addition, a reference group for the committee will be established: this will include representatives of the ministries, and will be kept informed of the committee's work and be able to provide input from the standpoint of important sectors. The Ministry of the Environment will provide the secretariat for the committee.

The committee should establish contact with interested parties in relevant sectors and organisations, for example by holding public consultations. The committee can as necessary draw on other relevant expertise.

The committee's results and recommendations will also be useful in Norway's preparations for the UN Conference on Sustainable Development (Rio+20), where green economy is to be one of the main themes. The committee should maintain contact with the Ministry of the Environment and the Ministry of Foreign Affairs during these preparations so that its expertise can be used in developing Norway's positions before the conference.

The committee's work will also be a key element of Norway's follow-up of the *Strategic Plan for Biodiversity 2011–2020* under the UN Convention on Biological Diversity. This plan highlights the importance of integrating the values of biodiversity and ecosystem services into management in various sectors and of recognising the importance of biodiversity and ecosystem services in development and poverty reduction. Countries are asked to develop national targets in line with the international ones, and Norway will report on its efforts to Conference of the Parties to the Convention on Biological Diversity in India in October 2012. The committee is therefore asked to provide an assessment of how Norway should follow up targets 2, 3, 14 and parts of target 19 from the *Strategic Plan for Biodiversity 2011–2020* by 1 August 2012.

The committee is expected to publish the results of its work report in the form of an Official Norwegian Report. The deadline for completion is 31 August 2013.

3. Members of the committee

The members of the committee are as follows:

Chair:

Managing Director	Stein Lier Hansen	Drammen
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Members:

Professor	Pål Vedeld	Ås
Environmental Economist	Kristin Magnussen	Fredrikstad
Senior Researcher	Iulie Aslaksen	Oslo
Professor	Claire Armstrong	Tromsø
Professor	Dag Hessen	Oslo
Director	Peter Johan Schei	Trondheim
Professor	Kjell Arne Brekke	Oslo
Research Director	Signe Nybø	Trondheim
Director	Kristin Sørheim	Tingvoll
Associate Professor	Morten Clemetsen	Aurland
Director	Karl-Göran Mäler	Stockholm