1 Introduction

On 17 and 18 March 2015, the second dialogue on the future of nature in Europe took place in the Museum of Natural Sciences in Brussels. The dialogue was organised by PBL Netherlands Environmental Assessment Agency and the European Centre for Nature Conservation (ECNC). The group of participants consisted of over 40 representatives of European organisations involved in nature conservation, forestry, agriculture, hunting, health care and research (see the list of participants on Page 11).

PBL and ECNC appreciate the number of high quality ideas generated during the dialogue. This report presents the summary results of the dialogue, which will be used as valuable input to the Nature Outlook. This study is being conducted by PBL to provide input for discussions about the future of nature and biodiversity in Europe. The study will be published in the first half of 2016, during the Dutch Presidency of the Council of the European Union.

This dialogue was the second in a series of three. Building on the first dialogue, it focused on working out perspectives for the Nature Outlook. The first dialogue took place on 2 and 3 December 2014 to generate the perspectives. The third dialogue is scheduled to take place on 17 and 18 June 2015 to derive the key messages from the perspectives.

2 Nature Outlook – opening session

At the start of the second dialogue, PBL department head Keimpe Wieringa explained the context of the project and answered various questions. The Dutch Ministry of Economic Affairs has requested PBL to produce a Nature Outlook. Reasons for this were the success of the Dutch Nature Outlook and the intention of the Ministry to organise a high level conference of the Member States of the European Union in April 2016. The European Environment: State and Outlook (European Environment Agency, 2015) indicates that Europe is not on track to meet its 2020 target of halting biodiversity loss.

The Nature Outlook is intended to be complementary to the mid-term review of the EU Biodiversity Strategy. It looks at the long-term future of Europe’s nature and biodiversity and should not be considered an evaluation of the past or the present. The Outlook will take the EU Biodiversity Strategy as a starting point, but will not question the goals of the Strategy. Rather, the Outlook will provide perspectives that may increase understanding about the differences in motives and viewpoints between various stakeholders, with the aim to identify new synergies and possible collaborations between citizens, economic sectors and actors, with respect to nature. The Nature Outlook may also propose new coalitions and integrated policy actions relevant for the EU Biodiversity Strategy. It will explore the scope for linking policies in various sectors, such as in agriculture, energy, water, public health, rural development and social cohesion.

The results will be presented on various occasions, such as during a dedicated conference organised by PBL in early 2016, a high level conference of the Member States in April 2016, and to DG Environment, the European Parliament and other institutes and networks.

Henk van Zeijts, project leader for the Nature Outlook, explained how the results of the first dialogue had been analysed and elaborated by PBL. The dialogues provide important input and are combined with other sources of information, including a literature review, design activities, and model calculations, along with an international consultation exercise. In elaborating the results of the first dialogue, the names of the perspectives and some of their content was modified in order to make them more consistent and contrasting. In this way, ‘Nightmare for nature’ was changed to ‘Boxed Nature’ and has become less drastic. ‘From the past to the future’ was changed to ‘Cultural Nature’.
‘Paradigm Shift’ and ‘Nature as foundation’ were seen to overlap too much; therefore, ‘Paradigm Shift’ was changed to ‘Functional Nature’ and is now focused on greening the economy and behavioural changes. ‘Nature as foundation’ was changed to ‘Wild Nature’, giving more attention to large nature areas.

During the interactive discussion session that followed, a number of questions were posed. Several participants asked for more clarification about the use of existing knowledge, the additional value of the study, how the dialogue outcomes are to be elaborated and how the results will be used. Specifically, some participants said that the EU Biodiversity Strategy already contains a vision, so the question was posed why we would need new ones. Some participants stated that perspectives should at least be as ambitious as the EU Biodiversity Strategy.

In relation to the first dialogue, one of the participants indicated that Functional Nature and Boxed Nature do not represent the main points discussed. For example, it had been agreed that it is important to use the socio-economic agenda in order to get business on board and that a paradigm shift would be required in several perspectives. However, this critical feature of ‘required change’ seems now to have disappeared. Also, although a paradigm shift is now integrated in Functional Nature, as part of the proposed transition towards a green economy, some still felt that the innovative ideas generated during the first dialogue had not been adequately included in the perspectives. An element of innovation appeared to be missing and some of the perspectives now seemed to be ‘business as usual’ and over-simplified. On the other hand, one participant said that society wants intrinsic nature, but that governments generally approach nature in an instrumental and economic way. In the end, some participants claimed, society will be unable to pay for nature and what will happen to it then? From this viewpoint, the Nature Outlook is being carried out at the right moment.

Several participants remarked that the perspectives could easily be misused; for example, by only selecting one of them and neglecting the others. Therefore, it is important to define clear messages. One participant indicated that we need to consider the perspectives as four different dimensions that can come together in one visionary perspective. Another participant added that the perspectives could be applied at different locations in Europe, but that not all perspectives would fit one location.

Other points raised include the following:

- PBL should make clear which assumptions are made about future developments in the context of nature – for example, what are the expectations regarding economic development, population development and climate change?
• One participant said that, since Boxed Nature is at odds with the EU Biodiversity Strategy, this perspective should at least be changed, if not removed.
• Marine nature is not included in the Nature Outlook.

In discussing these questions, the following points were highlighted:

• The Nature Outlook is a foresight study, it does not evaluate policy. Of course, it is necessary also to look back and construct perspectives on the basis of current knowledge. However, the focus is on developing a long-term outlook for Europe’s nature and biodiversity, including possible collaborations and integrated approaches across sectors that may play an important role.
• With regard to the relation with the ongoing Fitness checks of the Birds and Habitats Directives, Keimpe Wieringa stated that the Nature Outlook does not question the directives, but the study could help to implement the directives more effectively.
• PBL and the Dutch Ministry of Economic Affairs are not the same organisation. PBL is a national independent institute. But of course, PBL is not in a position to prescribe how organisations and groups use the results of the outlook.
• In order to work towards achieving the EU Biodiversity Strategy’s goal for 2050 and targets for 2020, additional effort as well as new ideas are needed.
• Marine nature and biodiversity have not been included in the Outlook, purely for pragmatic reasons – it would have increased the workload by too much.
• Boxed Nature is important to be included in the perspectives in order to cover all positions in the discourse about the future of nature. In the description of results, PBL will highlight the elements of the perspectives that would contribute to achieving the biodiversity goals.

3 Perspectives

Following the plenary presentations, participants were invited to further work out the perspectives in groups. Four tables were set up, each with working materials to focus on one perspective. In four rounds, participants were invited to share ideas for any changes or additions to further elaborate the perspectives, To do this, they used maps, iconic stickers and posters. During each round, participants were free to change tables to work on any of the other perspectives. For each round, participants were asked to discuss a different question:

1 What information could be added to the perspective?
2 How could the perspective be made more imaginative?
3 How could the relevance of the perspective be enhanced?
4 What (dis)advantages could the perspective generate?

Working in this way, participants had the opportunity to discuss their ideas, comments and suggestions in the groups.

The sections below provide summaries of the group sessions. The summaries are mainly based on the ideas that were mentioned during the plenary presentations of the perspectives at the end of the dialogue. However, a longer and more complete version of the report is being used by PBL to further elaborate the perspectives. For those interested, the longer version can be obtained by sending an email to ed.dammers@pbl.nl.

3.1 Wild Nature

Large areas of wilderness, natural ecosystems and biodiversity are important for the overall conservation agenda. Large areas should be seen as vital – they hold the key to
halt and reverse biodiversity loss, because of their complete ecosystems, including the presence of top predators. The scale of the areas helps to maintain vital genetic pools. This is important in the response to climate change and for adaptation and species migration. Furthermore, large areas can serve as a basis for other nature areas (with respect to natural processes and ecosystem services). Today, 18% of Europe is part of the Natura 2000 network, 2% of which consists of wilderness areas, though not fully coinciding with the network. New wilderness should be added to the 18% Natura 2000 areas, rather than replace any of it.

A strong socio-economic agenda is inherently related to large wilderness areas. The socio-economic benefits of these areas are, for example, enhanced by ecotourism. An important condition is that designation of the wilderness areas is properly defined, so that nature that has developed over the course of thousands of years is not sacrificed for short-term economic goals. However, the ‘landholders’ (better word then ‘landowners’) are key agents in this respect - they are able to realise why such nature is important, as it touches their lives. Market orientation and capacity building for local communities should be adopted as conditions rather than goals. In this way, the benefits for local communities and local landholders are maximised. The areas are large and diverse enough to substantially support specific forms of economic activity without compromising biodiversity objectives; for example, by charging an entry fee for wilderness areas. Non-intervention does not mean non-management. Wilderness areas need monitoring, research, tourist guidance and protection. A considerable amount of local employment would be involved in the management process.

Large areas of wilderness can provide important ecosystem services. When private sector funding is involved, economies of scale can be realised (more than in smaller traditionally managed areas). Natural habitats have a higher CO₂ storage factor than anthropogenic habitats and they can also play a major role in flood mitigation – which is beneficial for both agricultural and urban areas. Ecosystem services also generate benefits for society. Intensive wilderness experience lends itself to facilitating projects that tackle urban problems, such as youth at risk and conflicts. In the Northern Ireland conflict, guided wilderness adventures resulted in substantial behavioural changes among 200 community leaders across the country.

Disadvantages can be tackled, but they need to be managed appropriately, on a corporative basis. There is large potential for greater interaction between, for example, the conservation sector, farmers, landowners, foresters and hunters. There is common ground for developing a consensus agenda. Such opportunities are not yet properly explored at the moment. There is too much confrontation and polarisation, instead of cooperation. The socio-economic agenda lies at the heart of this common ground, which can be developed for mutual benefit. Collation and communication of best practices linked to this agenda will help to identify where benefits are to be expected.
3.2 Cultural Nature

Society is losing its contact with nature, as hardly any family has had a farmer in its last three generations. Many children have no physical contact with nature and think that milk comes from factories instead of cows. We should learn that nature is not ‘dirty’. Our connection with nature should be restored through increased accessibility and physical contact for all. Local pride and community ownership also will strengthen this connection with nature.

An important positive driver of change, in this perspective, is that of building on our common cultural heritage. There is a need to scale up local initiatives; for example, through the sharing of best practices. To allow more green space and multifunctional use of the cities (living areas, working areas, transport) means that clean and revitalised urban areas are needed. Attention should be given to social justice and to green education for young people. Participatory planning and building partnerships are suitable tools for local and regional authorities.

All land use is multifunctional. This means that objectives simultaneously relate to the preservation of cultural and natural heritage and their utilisation. Utilisation involves a broader spectrum of uses than those represented on the maps, ranging for example from experiential and recreational uses to the production of traditional and regional products to renewable energy.

Zoning of nature areas is important; thus providing a range of areas for protection, production and preservation of cultural heritage. Traditional production of agricultural and (agro)-forestry products is also relevant.

Water preservation and flood management in river systems should be addressed simultaneously and coherently because of climate issues. Water must be clean enough for recreation, while waterways are also being developed for shipping.

Important issues for agricultural areas include landscape diversity and the preservation of natural areas for ecosystem services, as well as areas for production of regional/traditional products and green energy. Agriculture, land use and agricultural practices are important in the preservation of cultural heritage.

Regarding urban areas, cities should be greened; more green areas should be established and there should be increased functional connectivity with urban life (e.g. through recreation, allotment gardens, guerrilla gardening or green schools). Greening urban areas should not be realised by means of urban sprawl – this would increase the pressures on agricultural and nature areas around cities.
There are various policies relevant in this perspective; for instance, those on the environment and culture. However, there are also policies focusing on other sectors, such as industry, which are important. There can be controversies and tensions between these policies. Important European policies are the Biodiversity Strategy, the second pillar of the CAP, and the European Landscape Convention.

3.3 Boxed Nature

The version originally disseminated by PBL prior to the second dialogue looks very much like the current situation regarding nature. Group participants felt that it would be more illustrative to go back to the ‘nightmare’ scenario described in the first dialogue, which included, for example, severe climate change impacts, corresponding water shortages or floods, consequent shifts in population and dimensions of social inequality.

Under this scenario, the role of the EU is seen to be significantly diminished, which would mean that environmental initiatives, responsibilities for nature and nature policies would rest with individual Member States. The lack of a pan-European vision and frameworks would, for example, result in roads being built without due consideration for the environment, wealthy people building villas in nature areas such as along the coast, and the poor being denied access to nature.

While remembering the ‘nightmare’ features of the Boxed Nature Perspective, the group also felt that it would be unrealistic; in particular, that people would start to respond to the threats facing nature (‘people power’). Already, there is evidence of the power of local actions; for example, when people mobilise and act to prevent a forest from being felled for the purpose of new infrastructure construction. Also, social exclusion can be a great motivator. For example, people in South Wales have converted industrial heritage (abandoned coal mines), frequently in beautiful nature areas, into sources of income. Rich hunters or landowners may take action to conserve nature, when authorities retreat. Groups that use nature are more likely to take initiative in places precious to them. The
description of the perspective may therefore also be modified towards actions that contribute positively to biodiversity, even in a market-based setting.

The group talked about ‘people power’ as an important factor. Social media can be a valuable means to rally people and their resources to buy land sites and manage them. Some people are passionate about nature. They have been in the past and will be in the future. Examples of measures that fit in this perspective are private investment in housing combined with nature, new estates, income from green tourism (experiences), investments by health insurance companies, generation of funds through windmills in forests, green philanthropy, crowd funding, ethical finance streams, and green saving mechanisms.

A balance should be struck between voluntary and regulatory instruments. When the right balance is struck, this could bring sectors together. It was stated that one must think outside the ‘green box’. We talk our own language: for example, we use words like ‘biodiversity’. We understand what this means, but others do not. We need to connect with other ‘boxes’, or if we cannot we need to find people who can communicate for us. Thinking outside the green box, also requires new thinking with respect to the public sector, as well as re-thinking about government and governance.

### 3.4 Functional Nature

Maybe the name of this perspective is wrong, since all nature is functional. Other names suggested were ‘Instrumental Nature’, ‘Resource Nature’ or ‘Service Nature’. Nature has functions that influence various spatial scales.

The perspective requires (a) paradigm shifts towards a more holistic approach; transforming the way in which we produce and consume. Here, multifunctionality and connectivity are important elements. Connectivity was not only seen in spatial terms, but especially also between economic sectors, as well as socio-economic and environmental groups.

The pathway to achieve this is defined in terms of system thinking. Education plays an important role in this perspective, as people should be aware of what nature does, what it means to them and provides for them. What are the real costs of products? This education, however, should not be traditional and people should be encouraged to educate themselves; lifelong learning is important, as is the need to think about and address issues holistically. The question of how much wilderness this perspective should include is related to the more general problem of prioritising the various services nature can provide.

Other important questions relate to how the rest of the world would be involved and what would be the potential consequences for and impacts on Europe. A wide range of sometimes quite controversial suggestions were made about what that could mean, for example, in terms of climate change, immigration, economic effects, local trade and energy provision.

Stronger integration between sectors is needed, especially between economy, nature protection and social wealth. Bio-inspired cities could reintroduce most of the ecosystem services that existed before the land was converted by humans.

There is a strong need for better communication about other less obvious benefits, for example, benefits provided by soils; the instruments with which one can address soil issues should be improved.
Issues related to ecosystem services are seen to lie in the translation of nature into economic values, the integration of ecosystem services into business models, and the use of private sector funding for these activities.

It was suggested to establish a cross compliance tool, under which road construction can only happen if a green infrastructure will also be implemented. This concept can also be used when upgrading existing roads, or downgrading or deconstructing them to improve fragmented landscapes (defragmentation).

Regarding agriculture, there is a need to move away from industrial agriculture, towards more multifunctional agriculture. There was some difference of opinion amongst the group’s participants about whether this perspective should be achieved by strengthening local food production (e.g. ‘eat locally’, reduce the length of food chains) or whether large-scale yet sustainable agriculture could also play a role.

It is important not only to focus on the ‘usual suspects’, such as the EU Biodiversity Strategy and Water Framework Directive, but also to adapt and redesign policies, such as the Cohesion Fund and Regional Development funds. These policies should be developed and applied to better address the large differences in terms of the expected contribution of functional nature in Europe. In addition, a better integration of such policies would improve ecological systems.

In this perspective, threats include those related to green and blue corridors and connected landscapes from the spread of new diseases and invasive species. But there are also benefits. Multifunctional landscapes can, for instance, minimise certain risks and increase resilience, such as to diseases. Moreover, functional nature can buffer extremes; for example, multifunctional landscapes can prevent erosion or increase water holding capacity. Functional nature is greatly linked to resilience. This perspective seems to have a high potential for green and innovative jobs.

4 Messages (initial ideas)

In addition to presenting the ideas generated for the further elaboration of the perspectives, the group representatives were also asked to share some initial ideas about messages, in preparation for the third dialogue. As explained, the third dialogue will focus on deriving messages from the perspectives.

The participants working on the Wild Nature perspective derived the following messages:

- Reopening the discussion on the Birds and Habitats Directives would not only damage conservation, but also economic prospects. Instead, it is important to focus on better
implementation – this involves working around the bureaucracy, recognising farmers and landowners as valuable allies and making sure there is proper compensation.

- Natura 2000 could embrace Wild Nature, recognizing existing wild areas, but actually Wild Nature should be part of any nature policy.
- Nature policy should be rooted locally and highly integrated with local socioeconomic agendas. This is important for increasing legitimacy and improving implementation of nature policy.

The participants working on Cultural Nature gave the messages:

- Work on the tensions and inconsistencies between policies.
- Create the means to harmonise themes on local, regional, national and EU levels. Climate change should be tackled at all scales.
- Promote a change in perceptions of values; nature has a cultural value.
- Pay more attention to social justice.

The participants working on Boxed Nature identified the following messages:

- Think out of the ‘green box’; integrate and synergise through brokering with other sectors.
- Develop innovation within policies; for example, with regard to urban development and the financial sector.
- A new balance between voluntary and regulatory instruments is needed. Natura 2000 regulation is still important and this cannot be replaced effectively by voluntary instruments.

Messages that were suggested by the participants working on Functional Nature are:

- Higher food prices are needed, but the social effects have to be taken into account; especially those on the poorest people.
- Celebrate the success stories.
- Owners of nature areas should be rewarded.
- Think beyond the ‘usual suspects’ of policy instruments; for example, rural development instruments could be redesigned or adapted to meet biodiversity targets.
- Many current measures proposed or financed are difficult for farmers to include in their farming practices. This problem is only partly related to goals or measures and more to how the compensation system is designed.
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