



No Net Loss and Net Positive Impact Approaches for Biodiversity

Exploring the potential application of these approaches in the commercial agriculture and forestry sectors

What are No Net Loss and Net Positive Impact approaches for biodiversity in a business context?

Leading companies in the primary natural resource sectors are setting more targeted and measureable environmental goals. This is based on an increasing recognition by business that they need to manage their operational and reputational risks due to major drivers of environmental change such as water scarcity, pollution, climate change, and biodiversity loss.

In regards to biodiversity related risks, such goals are increasingly being framed as 'No Net Loss' (NNL) or 'Net Positive Impact' (NPI) goals¹. While there are no universal definitions as yet, conceptually NNL and NPI goals are biodiversity goals for development projects. These goals call for negative biodiversity impacts caused by the project to be either balanced (for NNL) or outweighed (for NPI, also referred to as net gain) by biodiversity gains through compensation measures

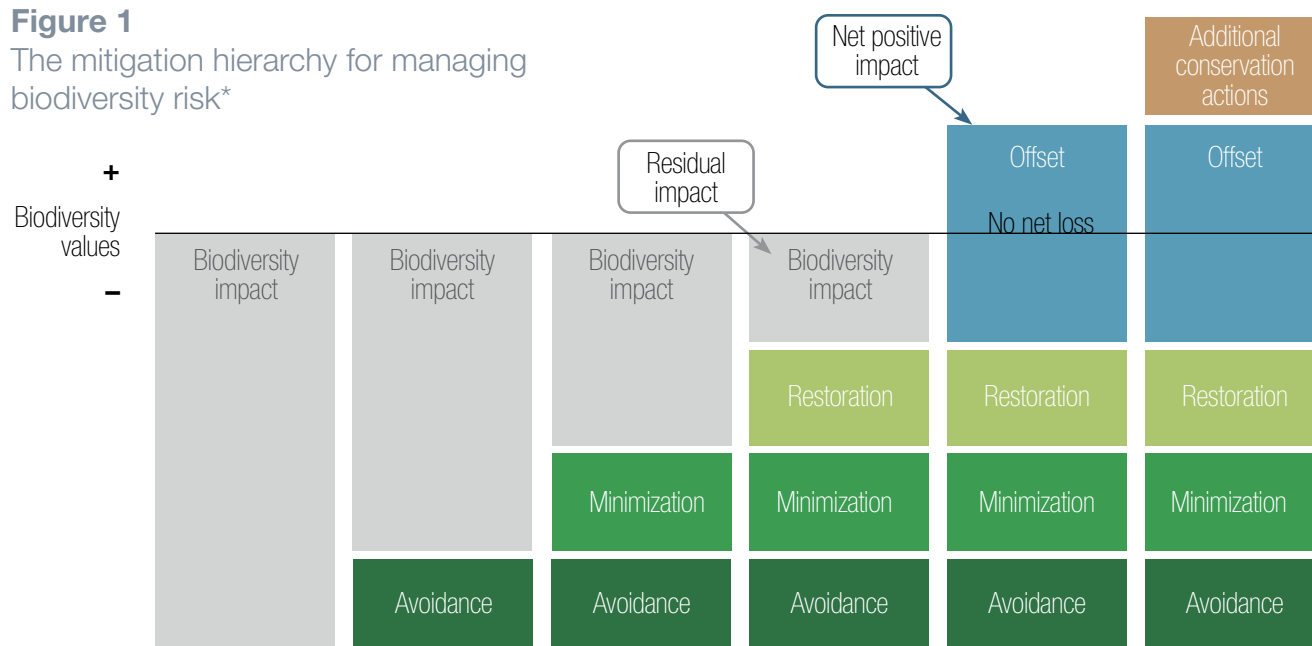
implemented in the project region. The biodiversity gains are evaluated against a baseline (e.g. a reference point or trajectory without the project occurring, or prior to the project occurring) of the relevant biodiversity values being impacted by the project. From a conservation perspective, achieving an NNL or NPI goal for a given project ultimately means no net reduction in the:

- diversity within and among species and vegetation types;
- long-term viability of species and vegetation types; and,
- functioning of species assemblages and ecosystems, including ecological and evolutionary processes.²

The 'net' in NNL and NPI acknowledges that some biodiversity losses at the development site are inevitable, and

that biodiversity gains may not be perfectly balanced in regards to the time, space, or type of biodiversity impacted. This is due to the inherent limitations of information available on the species and ecosystems involved.² It is therefore always recommended to overcompensate for residual impacts – meaning that defining and achieving an NPI goal is a precautionary way of ensuring an NNL outcome for biodiversity. For NPI goals to be achieved credibly, they typically must follow a systematic biodiversity management approach commonly known as the 'mitigation hierarchy' – widely regarded as the best practice approach for managing biodiversity risk and realizing conservation opportunities in development projects (see Figure 1).

Figure 1
The mitigation hierarchy for managing biodiversity risk*



*Image adapted from: UN Global Compact and IUCN 2012 Publication: A Framework for Corporate Action on Biodiversity and Ecosystem Services (pg 14). http://www.unglobalcompact.org/docs/issues_doc/Environment/BES_Framework.pdf

Why focus on the commercial agriculture and forestry sectors?

Developments in primary natural resource sectors such as agriculture, extractives, wood production, water management, wildlife trade and fisheries largely shape the state of global biodiversity as they exert direct pressures on biodiversity (namely: habitat loss and degradation, overexploitation, invasive species, pollution and climate change).³ These sectors also depend on biodiversity and ecosystems in various ways to provide food, fibre, wood, bioenergy and clean water

for the world's growing human population.³ Understanding the feasibility of NPI approaches in all of these sectors is therefore critical for the world to meet the UN Convention on Biological Diversity's mission of halting biodiversity loss by 2020, and its longer term vision of 'Living in Harmony with Nature' by 2050.⁴

To date however, much of the experience in implementing approaches with explicit NPI goals for biodiversity has been in the extractives

and infrastructure (E&I) sectors. In part, this is because these sectors typically have more spatially and temporally defined impacts managed by fewer stakeholders over a specific timeline, compared to the commercial agriculture and forestry (A&F) sectors. Also, E&I sectors generally have more financial capital available, as well as exposure to financial sector standards with NNL and NPI requirements (for certain habitat categories) such as IFC's Performance Standard 6 and the Equator Principles.^{5, 6}

What is the aim and approach of this report?

This report is an outcome of an exploratory workshop held by IUCN in October 2013, and subsequent discussions in 2014, of a working group of relevant business and conservation experts. The working group was convened by IUCN's Global Business and Biodiversity Programme. It is the beginning of a sector-specific discussion on the application and challenges of NPI approaches in business sectors with significant biodiversity impacts.

The objectives of this report are:

- 1) To learn from the NNL/NPI experience of the E&I sectors, and propose an organizing framework for applying NNL/ NPI approaches in other business sectors; and, 2) To explore the potential for applying NPI approaches in A&F sectors.

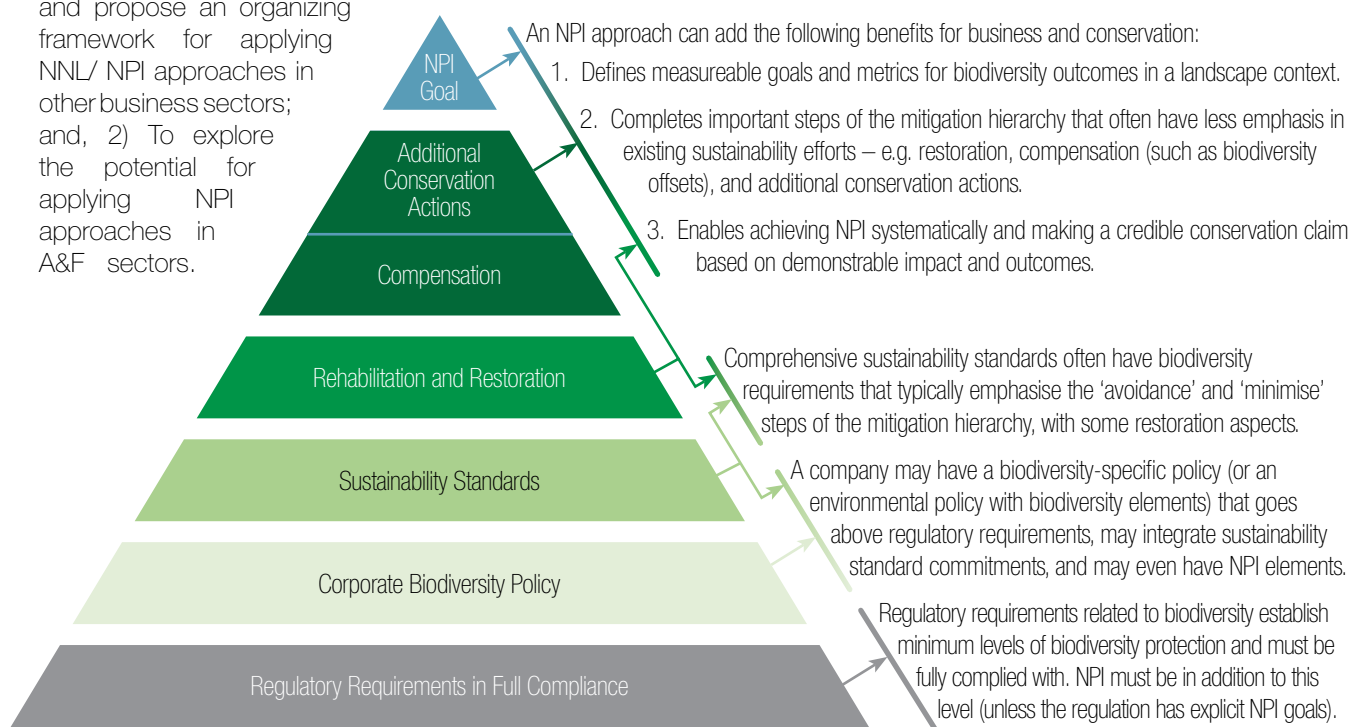
It outlines a five stage process to implement a generic NPI approach (see Figure 3), and describes what this process could look like when implemented in three hypothetical A&F landscape scenarios: 1) existing managed land, 2) using ecologically degraded land, and 3) expanding into new legally authorised concessions.

This report builds on existing sustainability efforts of the A&F sectors (e.g. sustainability standards)

and outlines the potential benefits an NPI approach could add in relevant situations (see Figure 2). It focuses mainly on voluntary efforts companies can take for NPI for biodiversity, and does not include issues related to public policy, ecosystem services, or socio-economic conditions. While these are important issues to consider, the working group decided to limit the scope of an already broad topic.

Figure 2

What benefits could an NPI approach add to current sustainability efforts in agriculture and forestry sectors?



Is an NPI approach potentially applicable to the commercial agriculture and forestry sectors?

Yes – based on the application of the five stage process, which includes the full implementation of the mitigation hierarchy – an NPI approach could potentially be applied in A&F development projects under two main conditions (not mutually exclusive):

1. Enhancing native biodiversity, and/or protecting species or areas of conservation concern:
 - Where A&F production systems are designed to host more native wildlife, and to reduce impacts on native wildlife.
 - Where species or areas of conservation concern are identified within the project site and are protected against negative impacts from productive activities.
2. Diversifying A&F production species on-site, and/or, improving productivity and natural resource use efficiency on-site along with promotion of safeguards to protect natural habitats off-site against conversion:
 - Where crop and timber species are diversified through

the introduction of new crops, agroforestry, or timber species on site.

- Where the productivity of A&F production systems are increased through yield gains and improved use of natural resources (e.g. water, soil, energy) and accompanied with safeguards to protect against conversion of existing natural areas including beyond project boundaries.

By highlighting favourable conditions for NPI approaches in A&F sectors, the report also indicates three main conditions that would not be favourable, on the basis that the risk of biodiversity losses would outweigh any opportunity for additional conservation gains:

1. Where the development project will cause large-scale impacts on ecosystems and/or species in natural areas where regional biodiversity loss is not occurring.
2. Where there is a risk that the protection measures and safeguards for natural habitat areas and/or species and areas of conservation concern in and

3. Where the identification of relevant biodiversity values to establish NPI goals has not been derived from existing societal biodiversity conservation goals in policies or plans (e.g. national biodiversity policies, strategies, action plans, international policy), and not taken account of local and other relevant stakeholder input (including farmers, foresters, and resident communities as applicable).



Figure 3

What are the main stages typically required to implement an NPI approach?

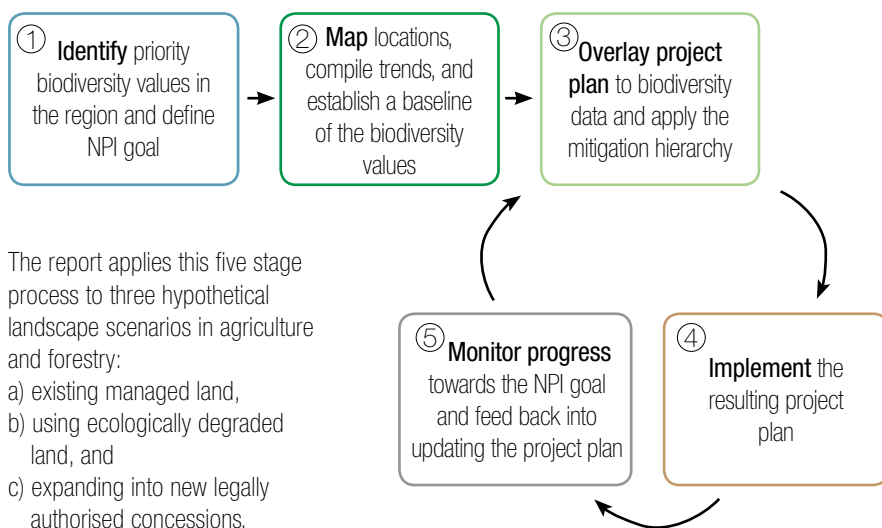
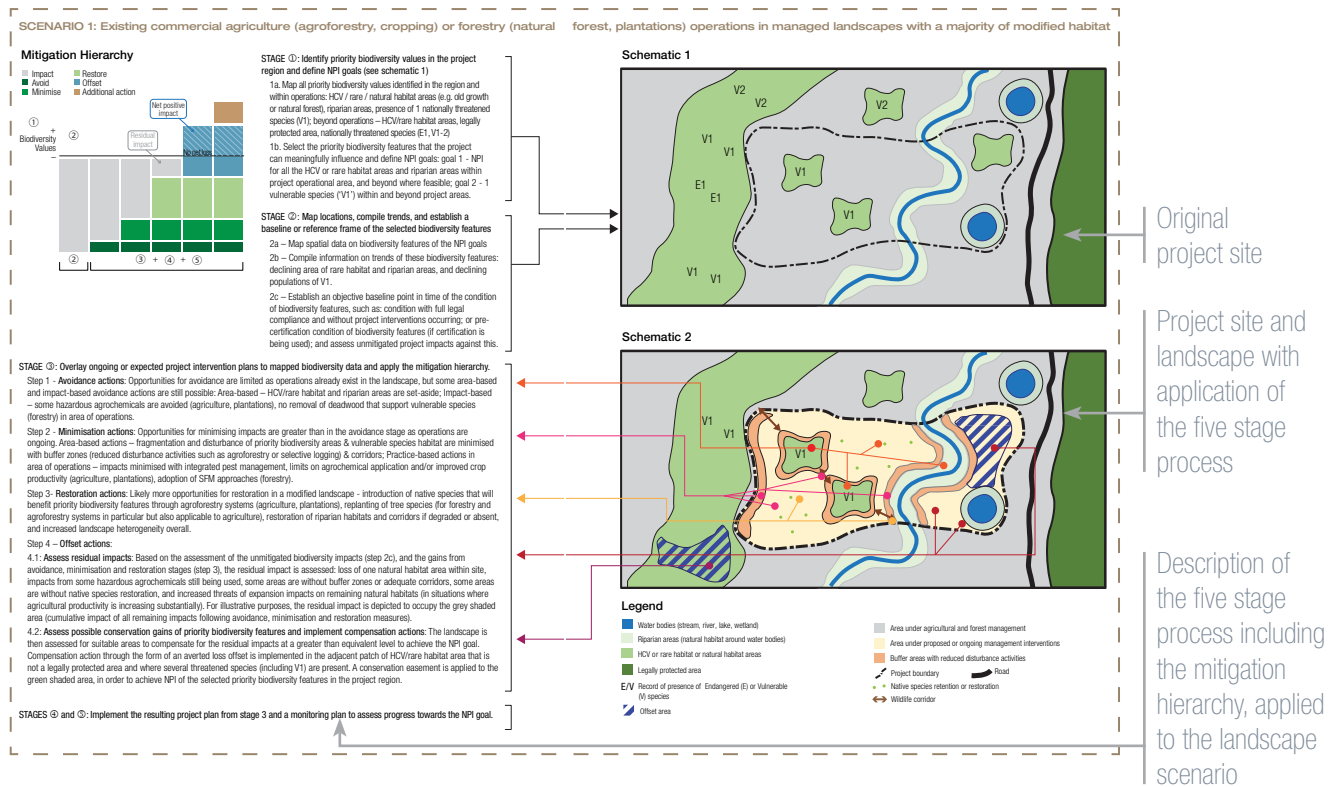


Figure 4

Process in practice: a snapshot of one hypothetical scenario*



* Refer to the report for the details of all 3 scenarios.

Next Steps

This report intends to stimulate new ways of thinking and should not be considered comprehensive, focussing instead on raising relevant issues that will require further investigation. Going forward, there is still much to do with exploring the application of an NPI approach in A&F sectors. The main recommendation of the working group for an important next step is:

- Pilot this NPI approach in suitable A&F situations. To date, the working group is not aware of projects that have piloted NPI approaches in

A&F landscapes. By piloting the NPI approach proposed here, its feasibility can be assessed in more detail, and practical information regarding some critical aspects in the A&F context can be gained, including:

- » Establishing appropriate reference frames for evaluation of progress towards NPI goals.
- » A better understanding of the boundaries between the steps of the mitigation hierarchy, including what A&F measures will count as meeting the objectives of the avoidance, minimise, restoration and compensation steps.

- » A broader consideration of appropriate compensation options including area-based offsets, resources allocated to addressing drivers of biodiversity loss, and strengthening of protected area management in the landscape or region.
- » A better understanding of the types of NPI claims that can be made once NPI goals are achieved.

IUCN's Global Business and Biodiversity Programme welcomes future collaborations with organisations interested in working on these suggested topics, to advance how A&F sectors can have more defined conservation impact.

More Information

Contact IUCN's Global Business and Biodiversity Programme at biobiz@iucn.org

The report is available at: www.iucn.org/business

