

This document should be read in conjunction with the proposed World Bank Policy to understand the proposed responsibilities of the World Bank (in the Policy) and the Borrowing Country (in the Standards).

SECOND DRAFT FOR CONSULTATION JULY 1 2015

**Environmental and Social Standard 6.
Biodiversity Conservation and Sustainable Management of Living
Natural Resources**

Introduction

1. ESS6 recognizes that protecting and conserving biodiversity and sustainably managing living natural resources are fundamental to sustainable development. This ESS addresses conservation of biodiversity, which is defined as the variability among living organisms from all sources including, inter alia, terrestrial, marine and other aquatic ecosystems and the ecological complexes of which they are a part; this includes diversity within species, between species, and of ecosystems.
2. This ESS also addresses sustainable management of living natural resources, which are defined as plants and animals produced or harvested for human or animal consumption and use. These resources come from a variety of sources, including all types of forestry, biomass, agriculture, including both annual and perennial crops and animal husbandry, including livestock; and both wild and capture fisheries, including all types of marine and freshwater organisms.
3. ESS6 recognizes the importance of maintaining core ecological functions of habitats and the biodiversity they support and that all habitats support complexities of living organisms and vary in terms of species diversity, abundance and importance.
4. ESS6 also addresses the need to consider the livelihood of affected communities, including Indigenous Peoples, whose access to, or use of, biodiversity, ecosystem services, or living natural resources may be affected by a project. The potential, positive role of affected communities, including Indigenous Peoples, in biodiversity conservation and sustainable management of living natural resources will also be considered.
5. Ecosystem services are the benefits that people derive from ecosystems. Ecosystem services are organized into four types: (i) provisioning services, which are the products people obtain from ecosystems and which may include food, freshwater, timbers, fibers, medicinal plants; (ii) regulating services, which are the benefits people obtain from the regulation of ecosystem processes and which may include surface water purification, carbon storage and sequestration, climate regulation, protection from natural hazards; (iii) cultural services, which are the nonmaterial benefits people obtain from ecosystems and which may include natural areas that are sacred sites and areas of importance for recreations and aesthetic enjoyment; and (iv) supporting services, which are the natural processes that maintain the other services and which may include soil formation, nutrient cycling and primary production.
6. Ecosystem services valued by humans are often underpinned by biodiversity. Impacts on biodiversity can therefore often adversely affect the delivery of ecosystem services. This ESS

ESS6. Biodiversity Conservation and Sustainable Management of Living Natural Resources

addresses how the Borrower can sustainably manage and mitigate impacts on biodiversity and ecosystem services throughout the project's lifecycle.

Objectives

- To protect and conserve biodiversity and its multiple values using a precautionary approach.
- To maintain the benefits from ecosystem services derived from the sustainable management of biodiversity and living natural resources.
- To promote the sustainable management of living natural resources to support local livelihoods and inclusive economic development, through the adoption of practices that integrate conservation needs and development priorities.

Scope of Application

7. The applicability of this ESS is established during the environmental and social assessment described in ESS1.
8. Based on the environmental and social assessment, the requirements of this ESS are applied to all projects that potentially affect biodiversity or habitat supporting biodiversity, either positively or negatively.
9. This ESS also applies to projects that involve the primary production and/or use of living natural resources.

Requirements

A. General

10. The environmental and social assessment as set out in ESS1 will consider direct and indirect project-related impacts on biodiversity. This process will consider threats to biodiversity, for example habitat loss, degradation and fragmentation, invasive alien species, overexploitation, hydrological changes, nutrient loading, pollution and incidental take, as well as projected climate change impacts. It will also take into account the differing values attached to biodiversity by affected communities and other interested parties.
11. The Borrower will avoid adverse impacts on biodiversity. When avoidance of adverse impacts is not possible, the Borrower will implement measures to minimize adverse impacts and restore biodiversity. The Borrower will ensure that competent biodiversity expertise is used to conduct the environmental and social assessment, to assist in the development of a mitigation hierarchy that complies with this ESS, and to verify the implementation of mitigation measures. Where appropriate, the Borrower will develop a Biodiversity Management Plan.

ESS6. Biodiversity Conservation and Sustainable Management of Living Natural Resources

Assessment of Risks and Impacts

12. Through the environmental and social assessment, the Borrower will identify the potential project-related risks to and impacts on habitats and the biodiversity that they support. The assessment undertaken by the Borrower will include consideration of potential risks to and impacts on the ecological integrity of the habitats, independent of their protection status and regardless of the current degree¹ of their disturbance or degradation. The extent of the assessment will be proportionate to the risks and impacts, based on their likelihood and their significance and severity, and reflect the concerns of potentially affected communities and, where relevant, other interested parties.

13. The Borrower's assessment will include baseline conditions to a degree that is proportional and specific to the anticipated risk and significance of impacts. In planning and undertaking biodiversity related baseline and impact assessments, the Borrower will refer to relevant GIIP utilizing desktop and field-based approaches as required. Where further investigations are needed on the significance of potential impacts, the Borrower will carry out additional studies and/or monitoring before undertaking any project-related activities that could cause materially adverse impacts to potentially affected habitats and the biodiversity that they support.

14. Where applicable, the assessment will consider the use of and dependence on living natural resources by affected communities, including Indigenous Peoples, who live in or around the project area and whose use of biodiversity may be affected by the project, as well as their potential role in the conservation and sustainable use of such biodiversity.

15. Where the assessment has identified potential impacts to biodiversity, the Borrower will manage these impacts in accordance with the mitigation hierarchy and GIIP. The Borrower will also adopt a precautionary approach and apply adaptive management practices in which the implementation of mitigation and management measures are responsive to changing conditions and the results of project monitoring.

Biodiversity Conservation

16. "Habitat" is defined as a terrestrial, freshwater, or marine geographical unit or airway that supports assemblages of living organisms and their interactions with the non-living environment. Habitats vary in their sensitivity to impacts and in the various values society attributes to them.

17. This ESS requires a differentiated risk management approach to habitat based on such sensitivity and values. This ESS addresses all habitats, including 'modified habitat', 'natural habitat', and 'critical habitat', along with 'legally protected and internationally and regionally recognized areas of biodiversity value'.

18. For the protection and conservation of biodiversity, the mitigation hierarchy includes biodiversity offsets, which will be considered as a last resort only after appropriate avoidance, minimization, and

¹ Pre-project.

ESS6. Biodiversity Conservation and Sustainable Management of Living Natural Resources

restoration measures have been applied but residual adverse impacts remain.² A biodiversity offset will be designed and implemented to achieve measurable, additional, and long-term conservation outcomes³ that can reasonably be expected to result in no net loss⁴ and preferably a net gain of biodiversity; in the case of critical habitats, a net gain⁵ is required. The design of a biodiversity offset will adhere to the “like-for-like or better” principle⁶ and will be carried out in alignment with GIIP. When a Borrower is considering the development of an offset as part of the mitigation strategy, qualified experts with knowledge in offset design and implementation will be involved. Certain adverse residual impacts cannot be offset, particularly if the affected area is unique and irreplaceable from a biodiversity standpoint. In such cases, the Borrower will not undertake the project unless it is redesigned to avoid the need for such offset, and to meet the requirements of this ESS.

Modified Habitat

19. Modified habitats are areas that may contain a large proportion of plant and/or animal species of non-native origin, and/or where human activity has substantially modified an area’s primary ecological functions and species composition⁷. Modified habitats may include, for example, areas managed for agriculture, forest plantations, reclaimed⁸ coastal zones, and reclaimed wetlands.

² Biodiversity offsets lead to measurable, long-term conservation outcomes as a result of actions designed to compensate for adverse biodiversity impacts from projects that remain after appropriate avoidance, minimization and restoration measures have been taken. Biodiversity offsets should follow GIIP and be developed with relevant stakeholders.

³ Measurable conservation outcomes for biodiversity must be demonstrated in situ (on-the-ground) and on an appropriate geographic scale (e.g., at the local, national or regional level).

⁴ No net loss is defined as the point at which project-related impacts on biodiversity are balanced by measures taken to avoid and minimize the project’s impacts, to undertake on-site restoration and finally to offset significant residual impacts, if any, on an appropriate geographic scale.

⁵ Net gains are additional conservation outcomes that can be achieved for the biodiversity values for which the critical habitat was designated. Net gains may be achieved through the development of a biodiversity offset and/or, in instances where the Borrower could meet the requirements of paragraph 24 of this ESS without a biodiversity offset, through the implementation of programs in situ (on-the-ground) to enhance habitat, and protect and conserve biodiversity.

⁶ The principle of “like-for-like or better” indicates that biodiversity offsets must be designed to conserve the same biodiversity values that are being affected by the project (an “in kind” offset). In certain situations, however, areas of biodiversity to be affected by the project may be neither a national nor a local priority, and there may be other areas of biodiversity with like values that are a higher priority for conservation and sustainable use and under imminent threat or in need of protection or effective management. In these situations, it may be appropriate to consider an “out-of-kind” offset that involves “trading up” (i.e., where the offset targets biodiversity of higher priority than that affected by the project), which will, for critical habitats, meet the requirements of paragraph 24 of this ESS.

⁷ This excludes habitat that has been converted in anticipation of the project.

⁸ Reclamation as used in this context is the process of creating new land from sea or other aquatic areas for productive use.

ESS6. Biodiversity Conservation and Sustainable Management of Living Natural Resources

20. This ESS applies to those areas of modified habitat that include significant biodiversity value, as determined by the risks and impacts identification process required in ESS1. The Borrower will minimize impacts on such biodiversity and implement mitigation measures as appropriate.

Natural Habitat

21. Natural habitats are areas composed of viable assemblages of plant and/or animal species of largely native origin, and/or where human activity has not essentially modified an area's primary ecological functions and species composition.

22. If natural habitats are identified as part of the assessment, the Borrower will seek to avoid adverse impacts on them in accordance with the mitigation hierarchy. Where natural habitats have the potential to be adversely affected by the project, the Borrower will not implement any project related activities unless:

- (a) There are no technically and financially feasible alternatives; and
- (b) Appropriate mitigation measures are put in place, in accordance with the mitigation hierarchy, to ensure no net loss and preferably a net gain of biodiversity over the long term, or, where appropriate and supported by relevant stakeholders, the conservation of biodiversity of greater importance. Where any residual adverse impacts remain, the Borrower will implement compensatory measures, such as biodiversity offsets, where appropriate.

Critical Habitat

23. Critical habitat is defined as areas with high importance for biodiversity, including:

- (a) highly threatened or unique ecosystems;
- (b) habitat important to Critically Endangered or Endangered species, as listed in the IUCN Red List of threatened species or under national law;
- (c) habitat important to endemic or restricted-ranges species;
- (d) habitat supporting globally or nationally significant concentrations of migratory or congregatory species;
- (e) ecological functions or characteristics that are needed to maintain the viability of the biodiversity features described above in (a) to (d).

24. In areas of critical habitat, the Borrower will not implement any project activities unless all of the following conditions are met:

ESS6. Biodiversity Conservation and Sustainable Management of Living Natural Resources

- (a) No other viable alternatives within the region exist for development of the project in habitats of lesser biodiversity value;
- (b) All due process required under international obligations or national law that is a prerequisite to a country granting approval for project activities in or adjacent to a critical habitat has been complied with;
- (c) The potential adverse impacts, or likelihood of such, on the habitat will not lead to measurable adverse impacts on those biodiversity values for which the critical habitat was designated;
- (d) The project is designed to deliver net gains for critical habitat of concern to the project area;
- (e) The project is not anticipated to lead to a net reduction in the population⁹ of any Critically Endangered, Endangered, or range-restricted Vulnerable species, over a reasonable time period;¹⁰
- (f) New or renewed forestry or agricultural plantations will not convert or degrade any critical habitat, either on-site, in adjacent or downstream areas;
- (g) The project will not involve significant conversion or degradation of critical habitats, including forest areas; and
- (h) A robust and appropriately designed, long-term biodiversity monitoring and evaluation program aimed at assessing the status of critical habitat is integrated into the Borrower's management program.

25. Where a Borrower has satisfied the conditions set out in paragraph 24, the project's mitigation strategy will be described in a Biodiversity Management Plan and set out in the legal agreement (including the ESCP).

⁹ Net reduction is a singular or cumulative loss of individuals that affects the species' ability to persist at the global and/or regional/national scales for many generations or over a long period of time. The scale (i.e., global and/or regional/national) of the potential net reduction is determined based on the species' listing on either the (global) IUCN Red List and/or on regional/national lists. For species listed on both the (global) IUCN Red List and the national/regional lists, the net reduction will be based on the national/regional population.

¹⁰ The timeframe in which Borrowers must demonstrate "no net reduction" of Critically Endangered and Endangered species will be determined on a case-by-case basis and, where appropriate, in consultation with qualified experts and taking into account the species' biology.

ESS6. Biodiversity Conservation and Sustainable Management of Living Natural Resources

26. In instances where biodiversity offsets are proposed as part of the mitigation hierarchy, the Borrower will demonstrate through an assessment that the project's significant residual adverse impacts on biodiversity will be adequately mitigated to meet the conditions of paragraphs 18 and 24.

Legally Protected and Internationally Recognized Areas of Biodiversity Value

27. Where the project occurs within or has the potential to adversely affect an area that is legally protected¹¹, designated for protection, or regionally or internationally recognized, the Borrower will ensure that any activities undertaken are consistent with the area's legal protection status and management objectives. The Borrower will also identify and assess potential project-related adverse impacts and apply the mitigation hierarchy so as to prevent or mitigate adverse impacts from projects that could compromise the integrity, conservation objectives or biodiversity importance of such an area.

28. The Borrower will meet the requirements of paragraphs 16 through 26 of this ESS, as applicable. In addition, the Borrower will:

- (a) Demonstrate that the proposed development in such areas is legally permitted;
- (b) Act in a manner consistent with any government recognized management plans for such areas;
- (c) Consult and involve protected area sponsors and managers, affected communities including Indigenous Peoples, and other interested parties on planning, designing, implementing, monitoring, and evaluating the proposed project, as appropriate; and
- (d) Implement additional programs, as appropriate, to promote and enhance the conservation aims and effective management of the area.

Invasive Alien Species

29. Intentional or accidental introduction of alien, or non-native, species of flora and fauna into areas where they are not normally found can be a significant threat to biodiversity, since some alien species can become invasive, spreading rapidly and out-competing native species.

30. The Borrower will not intentionally introduce any new alien species (not currently established in the country or region of the project) unless this is carried out in accordance with the existing regulatory framework for such introduction. Notwithstanding the above, the Borrower will not deliberately introduce any alien species with a high risk of invasive behavior regardless of whether such introductions are permitted under the existing regulatory framework. All introductions of alien species will be subject to a risk assessment (as part of the Borrower's environmental and social assessment) to determine the

¹¹ This ESS recognizes legally protected areas that meet the following definition: "A clearly defined geographical space, recognized, dedicated and managed, through legal or other effective means, to achieve the long-term conservation of nature with associated ecosystem services and cultural values." For the purpose of this ESS, this includes areas proposed by governments for such designation.

ESS6. Biodiversity Conservation and Sustainable Management of Living Natural Resources

potential for invasive behavior. The Borrower will implement measures to avoid the potential for accidental or unintended introductions including the transportation of substrates and vectors (such as soil, ballast, and plant materials) that may harbor alien species.

31. Where alien species are already established in the country or region of the proposed project, the Borrower will exercise diligence in not spreading them into areas in which they have not already been established. Where feasible, the Borrower will take measures to eradicate such species from the natural habitats over which the Borrower has management control.

Sustainable Management of Living Natural Resources

32. Borrowers with projects involving the primary production or use of living natural resources will assess the sustainability of the resources and their use, as well as the potential impacts of this production or use on local, nearby or ecologically linked habitats, biodiversity and communities, including Indigenous Peoples.

33. Borrowers will manage living natural resources in a sustainable manner, through the application of good management practices and available technologies. Where such primary production practices are codified in standards that are globally, regionally, or nationally recognized¹², particularly for industrial-scale operations, the Borrower will implement sustainable management practices consistent with these standards, as relevant to such operations.

34. Where relevant and credible standard(s) exist, but the Borrower has not yet obtained independent verification or certification to such standard(s), the Borrower will conduct a pre-assessment of its conformity to the applicable standard(s) and take actions to achieve such verification or certification in a timeframe acceptable to the Bank.

35. In the absence of a relevant and credible global, regional, or national standard for the particular living natural resource in the country concerned, the Borrower will commit to applying GIIP.

36. Where the project includes land-based commercial agriculture and forestry plantation (particularly projects involving land clearing or afforestation), the Borrower will locate such projects on land that is already converted or highly degraded (excluding any land that has been converted in anticipation of the project). In view of the potential for plantation projects to introduce invasive alien species and threaten biodiversity, such projects will be designed to prevent and mitigate these potential threats to natural habitats. When the Borrower invests in production forestry in natural forests, these forests will be managed sustainably.

¹² Globally, regionally, or nationally recognized standards for sustainable management of living natural resources are those which: (a) are objective and achievable; (b) are founded on a multi-stakeholder consultative process; (c) encourage step-wise and continual improvements; and (d) provide for independent verification or certification through appropriate accredited bodies for such standards.

ESS6. Biodiversity Conservation and Sustainable Management of Living Natural Resources

37. For harvesting operations conducted by small-scale producers, by local communities under community forest management, or by such entities under joint forest management arrangements, where such operations are not directly associated with an industrial-scale operation, the Borrower will ensure that they: (a) have achieved a standard of forest management developed with the meaningful participation of locally-affected communities, consistent with the principles and criteria of responsible forest management outlined in paragraph 36, even if not formally certified; or (b) adhere to a time-bound action plan to achieve such a standard. The action plan must be developed with the meaningful participation of communities and be acceptable to the Bank. The Borrower will monitor all such operations with the meaningful participation of locally-affected communities.

38. If a non-forestry project financed by the Bank includes land clearing and related salvage logging that cannot follow applicable globally, regionally or nationally recognized standards as per paragraph 33 of this ESS, the Borrower will ensure that logging areas are kept to a minimum and justified by the project's technical requirements, and that relevant national legislation and other relevant standards are being followed.

39. Borrowers involved in the industrial production of crops and animal husbandry will follow GIIP to avoid or minimize adverse risks and impacts and resource consumption. Borrowers involved in large-scale commercial farming of animals for meat or other animal products (such as milk, eggs, wool) will employ GIIP in animal husbandry techniques, with due consideration for religious and cultural principles.

B. Primary Suppliers

40. Where a Borrower is purchasing primary production including food, timber and fiber commodities that is known to originate from locations or areas where there is a risk of significant conversion or degradation of natural or critical habitats, the Borrower's environmental and social assessment will include an evaluation of the systems and verification practices used by the primary suppliers.¹³

41. The Borrower will establish systems and verification practices which will:

- (a) identify where the supply is coming from and the habitat type of the source area;
- (b) provide for an ongoing review of the Borrower's primary suppliers;
- (c) limit procurement to those suppliers that can demonstrate¹⁴ that they are not contributing to significant conversion or degradation of natural or critical habitats; and

¹³ Primary suppliers are those suppliers who, on an ongoing basis, provide directly to the project goods or materials essential for the core functions of the project. Core functions of a project constitute those production and/or service processes essential for a specific project activity without which the project cannot continue.

¹⁴ This may be demonstrated by delivery of certified product, or progress towards verification or certification under a credible scheme in certain commodities and/or locations.

ESS6. Biodiversity Conservation and Sustainable Management of Living Natural Resources

(d) where possible, require actions to shift the Borrower's primary suppliers to suppliers that can demonstrate that they are not significantly adversely impacting these areas.

42. The ability of the Borrower to fully address these risks will depend upon the Borrower's level of control or influence over its primary suppliers.