Environmental and Social Standard 6. Biodiversity Conservation and Sustainable Natural Resources Management
ESS6: BIODIVERSITY CONSERVATION AND SUSTAINABLE NATURAL RESOURCES MANAGEMENT

I. INTRODUCTION

1. This Environmental and Social Standard (ESS) 6 recognizes that the conservation of biodiversity and sustainable management of living natural resources are fundamental to sustainable development.

2. This ESS6 recognizes the importance of maintaining core ecological functions of habitats and the biodiversity they support. Biodiversity often underpins ecosystem services valued by humans and therefore risks to, and impacts on, biodiversity often adversely affect the delivery of ecosystem services.

3. This ESS6 recognizes that the livelihoods of Indigenous Peoples and other project-affected persons that access or use ecosystem services may be disproportionately impacted by project activities.

II. OBJECTIVES

a. Protect and conserve biodiversity and ecological function and connectivity in a changing climate;

b. Apply the mitigation hierarchy and the precautionary approach to achieve a minimum of no net loss and, preferably, a net gain of biodiversity;

c. Maintain the benefits from ecosystem services and promote the sustainable management and use of living natural resources.

III. SCOPE OF APPLICATION

4. The applicability of this ESS6 is established during the environmental and social (E&S) assessment process described in ESS1.

IV. GENERAL

5. The E&S assessment process described in ESS1 will be used to determine potential direct, indirect, landscape-level, and cumulative project impacts to biodiversity or ecosystem services and the applicability of this ESS6. It will especially focus on habitat loss, degradation, and fragmentation, invasive alien species, overexploitation, hydrological changes, nutrient loading, pollution, and projected climate change impacts.

6. The borrower/client will use project screening and scoping to determine the requirements for a biodiversity assessment. The extent of the assessment will be proportionate to the nature and scale and potential risks and impacts of a project and the sensitivity of the biodiversity and ecosystem services that could be affected. The scoping process will also be used to determine the potential presence of natural habitats, priority biodiversity features, and critical habitat in a project-affected area.

7. The borrower/client will ensure that the biodiversity assessment applies good international practice (GIP), in consultation with ADB, and will retain appropriate experts as determined through the E&S assessment process described in ESS1.

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8. The biodiversity assessment will be quantitative to the extent possible, depending on the nature and scale of a project’s potential risks to, and impacts on, biodiversity. Proportionate to the risks and impacts identified, the biodiversity assessment may be standalone or may be integrated into the E&S assessment process described in ESS1. Based on the results of the biodiversity assessment, the borrower/client may be required to undertake additional studies and/or monitoring linking to wider assessment work such as on environmental flows.

9. The borrower/client, as part of the biodiversity assessment, will also consider and, where possible, quantify a project’s dependence and impacts on ecosystem services within the project-affected area, as well as the use of and dependence on ecosystem services and natural capital by project-affected communities, including Indigenous Peoples.

10. As a priority, the borrower/client will avoid adverse impacts to biodiversity and ecosystem services. Where avoidance is not possible, the borrower/client will follow the mitigation hierarchy and minimize or mitigate adverse impacts within a project-affected area. The borrower/client will only consider offsets as a last resort, where any significant residual impacts remain despite best efforts to avoid, minimize, or mitigate adverse impacts.

11. The borrower/client will, in consultation with ADB, ensure all biodiversity assessment and development of subsequent management plans and a biodiversity action plan (BAP), where required, are completed before undertaking project activities that could adversely impact biodiversity.

12. The borrower/client will ensure activities comply with the host country’s applicable laws, including those implementing the host country’s obligations under international laws. Such laws will include those related to access and benefit sharing in the utilization of genetic resources. In the absence of the host country’s applicable laws on a specific topic, the borrower/client will follow the relevant GIP.

13. If there are significant changes to a project that result in additional risks to, or impacts on, biodiversity, particularly where these will impact project-affected persons, including Indigenous Peoples, the borrower/client will meaningfully consult with project-affected persons on how to mitigate these risks and impacts and will update relevant plans accordingly, setting out any additional mitigation measures. The borrower/client will disclose the updated plans.

A. Biodiversity Conservation

14. Where the E&S assessment process has identified potential project-related risks to and impacts on biodiversity, the borrower/client will manage these risks and impacts by following a precautionary approach, applying the mitigation hierarchy, and implementing adaptive management practices as necessary.

15. As part of the biodiversity assessment, the borrower/client will refine results of project screening and scoping to identify the degree of biodiversity importance and sensitivity by categorizing habitat located within a project-affected area as ‘modified habitats’, ‘natural habitats’ and/or ‘critical habitat’.
16. As part of the biodiversity assessment, the borrower/client will also identify priority biodiversity features. These features provide indicators of importance, sensitivity, and value and encompass: (i) threatened ecosystems; (ii) geographically-restricted ecosystems; (iii) threatened species; (iv) endemic/geographically restricted-range species; (v) geographically-restricted assemblages; (vi) aggregations of migratory or congregatory species; (vii) areas associated with key evolutionary processes; or (viii) ecological functions that are vital to maintaining the viability of biodiversity described in this para. Priority biodiversity features may be present in any category of habitat and are a sub-set of biodiversity that is particularly irreplaceable or vulnerable.

17. Modified habitats are areas that 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 or species composition. Within modified habitats, priority biodiversity features may occur, but at levels that may be too low to qualify these areas as critical habitat.

18. In areas of modified habitats, the borrower/client will implement mitigation measures to ensure no further degradation of habitat and no net loss of biodiversity. Particular measures may be required for priority biodiversity features depending on the nature and scale of project risks and impacts.

19. Natural habitats are areas composed of assemblages of plant and animal species of largely native origin, where human activity has not essentially modified an area’s primary ecological functions and species composition. Within natural habitats, priority biodiversity features may occur, but at levels that may be too low to qualify these areas as critical habitat.

20. The borrower/client will not implement any project activities which may cause significant adverse impacts to natural habitats or their priority biodiversity features, unless:

(i) no other viable alternatives exist for development of a project in modified habitats;

(ii) a project is permitted under the host country’s applicable laws, including those governing the priority biodiversity features, and all requirements under such laws have been complied with;

(iii) stakeholders are consulted in accordance with ESS10; and

(iv) mitigation measures are put in place, in accordance with the mitigation hierarchy, to ensure delivery of no net loss, or preferably, a net gain, of any impacted natural habitats and priority biodiversity features over the long term.

21. Critical habitat is a subset of natural and modified habitats, comprising areas of highest biodiversity value of significant importance to one or more types of priority biodiversity features.

22. The borrower/client will not implement any project activities which may cause adverse impacts to critical habitat or its priority biodiversity features, unless:

(i) no other viable alternatives exist for development of a project in modified habitats or, where not possible, natural habitats;

(ii) quantitative analysis demonstrates that the overall benefits from a project will substantially outweigh the project costs, including those to ecosystem services, natural capital, and biodiversity;
(iii) a project is permitted under the host country’s applicable laws, including those governing the priority biodiversity features, and all requirements under such laws have been complied with;
(iv) relevant stakeholders are consulted in accordance with ESS10;
(v) mitigation measures are put in place, in accordance with the mitigation hierarchy, to ensure delivery of a net gain of any potentially-impacted critical habitat or priority biodiversity features for which it was defined; and
(vi) a project is not anticipated to have a measurable adverse residual net impact on any other priority biodiversity features.

23. Some areas of critical habitat are of such high importance that the borrower/client will not propose financing for projects in such areas, or project activities by suppliers in these areas, with the exception of those projects specifically designed to contribute to the conservation of such areas, or unless otherwise agreed with ADB. These areas comprise:

(i) Alliance for Zero Extinction (AZE) sites;
(ii) UNESCO Natural and Mixed World Heritage (WH) Sites; and
(iii) Free-flowing sections of rivers 500 km or longer in length.

24. Where appropriate, the borrower/client will ensure that biodiversity conservation measures incorporate local and traditional knowledge and practices. When Indigenous Peoples are affected by a project, the borrower/client will integrate measures that incorporate the traditional culture, knowledge, and practices of affected Indigenous Peoples in accordance with ESS7.

B. Protected Areas and Internationally Recognized Areas

25. Where a project may occur within, or has the potential to adversely affect, a protected area and/or internationally recognized area, or an area that is formally proposed for either status by a competent government authority, the borrower/client will ensure that any project activities are consistent with the objectives of such areas and will follow the relevant requirements set out for modified, natural, and critical habitats. Where no such objectives exist, the borrower/client will consult with relevant stakeholders to establish what these objectives will be, and then act in a manner consistent with these objectives. The borrower/client will also:

(i) demonstrate that the proposed development in the area is legally permitted;
(ii) comply with any government-recognized management plans for such areas;
(iii) consult and involve protected area managers and stakeholders, in accordance with ESS10, including any Indigenous Peoples in accordance with ESS7;
(iv) fully apply the mitigation hierarchy so as to avoid or mitigate adverse impacts that could compromise the integrity, conservation objectives, or biodiversity importance of the area; and
(v) implement programs contributing to or that are additional to any that may be ongoing, to promote and enhance the conservation aims and effective management of the area.

26. The borrower/client will consider protected areas or parts of protected areas that have recently been downgraded, downsized, or degazetted in anticipation of a project as if they are still protected.
C. Project Design and Implementation

27. For projects where potential adverse risks to and impacts on biodiversity are identified, the borrower/client will specify mitigation measures in a biodiversity management plan (BMP) which, according to the nature and scale of a project’s risks to and impacts on biodiversity, may be a standalone plan or may be integrated into the ESMP described in ESS1. For projects in areas of critical habitat and for High Risk or Substantial Risk projects with significant biodiversity risks and impacts, the borrower/client will engage qualified experts to prepare a standalone BMP.

28. Biodiversity offsets are a last resort. Where it has been determined that they are necessary, the borrower/client will demonstrate that all other viable avoidance and mitigation options have first been exhausted. The borrower/client will also demonstrate through an assessment of project risks and impacts, mitigation, and realistic offset gains that a project will achieve no net loss or a net gain, as applicable, within a reasonable timeframe.

29. If offsets are being considered as part of a project, the borrower/client will demonstrate, as part of the E&S assessment process described in ESS1 and prior to project appraisal or final credit approval, the offsetability of the project, recognizing that some impacts are not offsetable.

30. In the event that biodiversity offsets are unavoidable, the borrower/client will plan offset implementation and financing to ensure maintenance of offset gains for at least as long as a project has impacts. This will be described in a standalone Biodiversity Offset Management Plan (BOMP) or, for small-scale offsets, may be included as part of a BAP. For offsets of unavoidable impacts on critical habitat, the borrower/client will engage qualified experts to prepare a BOMP.

31. For a project likely to cause significant adverse impacts to priority biodiversity features, the borrower/client will design a long-term monitoring and evaluation program for the priority biodiversity features using relevant management tools. The program will include quantitative completion indicators or targets. For a project implemented in areas of critical habitat and for high or substantial risk projects with significant biodiversity impacts, the borrower/client will produce a separate Biodiversity Monitoring and Evaluation Plan (BMEP) and will engage independent experts to verify monitoring information.

D. Invasive Alien Species

32. The borrower/client will avoid, and proactively prevent, accidental or deliberate introduction of invasive alien species that could have significant adverse impacts on biodiversity. Specifically, the borrower/client:

(i) will not intentionally introduce alien species into areas where they are not normally found unless this is carried out in accordance with the regulatory framework governing such introduction;

(ii) will not intentionally introduce species known to be invasive into new environments;

(iii) will identify potential risks, impacts, and mitigation options related to accidental transfer and release of alien species;

(iv) will comply with the host country’s applicable laws and relevant international conventions including those governing international shipping of goods;
(v) will exercise diligence in not spreading any alien species already established in the country or region of a proposed project into areas in which they have not already been established; and
(vi) will document mitigation of alien species risks and impacts in the BMP or BAP, as appropriate.

33. For the purposes of this ESS6, living modified organisms or genetically modified organisms that are or may be transported into a *host country* are considered to be alien species, with similar potential for invasive behavior as well as potential for gene flow to related species. Any potential introduction of such organisms should be assessed in compliance with a *host country’s applicable laws* and requirements set out in this ESS, and if relevant, a *GIP*.

**E. Primary Suppliers**

34. Through the E&S assessment process described in ESS1, the borrower/client will identify risks relating to primary suppliers or suppliers engaged by such primary supplier which have, or whose supply of goods or services have, the potential to cause significant adverse impacts to ecosystems and the biodiversity that they support. The borrower/client will ensure risk-based sustainable resource procurement, management and verification procedures are in place to evaluate its primary suppliers or suppliers engaged by them. The procedure will specify that:

(i) only supplies of a legal and sustainable origin are procured;
(ii) the sourcing of supplies is monitored and documented; and
(iii) where possible, procurement of natural resources is limited to those suppliers that can demonstrate that they are not causing significant adverse impacts to natural habitats, priority biodiversity features, critical habitats, protected areas, or internationally recognized areas.

**F. Sustainable Management of Living Natural Resources**

35. The borrower/client will adhere to the requirements in this ESS6 where a project involves industrial agriculture or livestock activities, the primary production of living natural resources, or where such resources are essential for a specific project activity and without which a project cannot continue.

36. Where practices of sustainable management of living natural resources have been codified in standards that are globally, regionally, or nationally recognized, the borrower/client and ADB will agree on the applicable standard. Where no such standards exist for particular living natural resources that are affected by a project, the borrower/client will apply appropriate GIP for sustainable management of living natural resources.

37. Where a project involves industrial livestock activities, the borrower/client will apply appropriate GIP for animal welfare and livestock operations.

38. Where a project involving livestock production has the potential to interface with wild animals, the borrower/client will undertake additional specific assessment to identify potential risks for the spread of zoonotic diseases.
V. MONITORING AND DISCLOSURE

39. Depending on the level of risks and impacts with regards to biodiversity conservation and living natural resources in the context of a project, the borrower/client may prepare additional studies and management tools that are required through this ESS6 and as relevant to the project and its risks and impacts. As specified in ESS1, these will support the analysis of impacts and identification of mitigation measures and will be part of or may be annexed to the E&S assessment undertaken for a project.

40. The management tools required by this ESS6 may include biodiversity assessment, BOMP, BAP, and BEMP, and all of which may be prepared and disclosed as standalone documents or as part of the project ESMP.

41. The borrower/client will monitor the implementation of the management tools prepared under this ESS6 in accordance with the requirements in the environmental and social commitment plan (ESCP)/environmental and social action plan (ESAP) and ESS10.