

Public Information Note

Ongoing World Bank Study of Biodiversity Offsets

1. **Quick Summary.** An ongoing World Bank study is examining the actual and potentially expanded use of biodiversity offsets for addressing the significant pressures upon natural habitats in many African and other developing countries. Under the right circumstances, biodiversity offsets can be a valuable tool for mitigating certain adverse impacts of large-scale development projects, while mobilizing additional resources for biodiversity conservation. Funded mainly by the World Bank's Program for Forests (PROFOR), this study is expected to produce (i) a concise Biodiversity Offsets Toolkit, (ii) a more detailed Biodiversity Offsets Sourcebook, and (iii) a Roadmap for the potential future development of aggregate biodiversity offset systems in two selected African countries, Liberia and Mozambique. These outputs are intended to provide user-friendly technical guidance that will facilitate the improved and (where appropriate) expanded use of biodiversity offsets in certain development projects, including (but not limited to) those supported by the World Bank Group. This study began in July 2013 is expected to conclude around June 2015.

Reasons for this Study:

2. **Addressing Pressures on Natural Habitats.** In many African and other developing countries, the remaining natural ecosystems are under severe pressure from a variety of factors. These include rapidly-spreading roads, dams, and other infrastructure, as well as the allocation of large areas to mining, commercial agriculture, and other uses that do not maintain natural habitats. In this context, conservation offsets offer a promising mechanism for promoting the conservation and sustainable management of natural ecosystems on a significant scale. Conservation offsets typically support or strengthen protected areas of similar or greater conservation value than the area lost to the project, although there are many variations (such as species-based restoration). The driving impetus for such offset schemes is usually biodiversity, although the associated conservation areas provide additional ecosystem services such as soil and water conservation, flood mitigation, and habitat for sustainably exploitable fisheries. In an era of often flat--and sometimes declining--governmental support for conservation in general and protected areas in particular, biodiversity offsets can provide an underutilized opportunity to mobilize substantial new funding, from public infrastructure accounts and particularly from the private sector.

3. **Environmental Impact Mitigation.** Biodiversity offsets are not a panacea, nor are they always the best tool available for achieving conservation objectives. Under the "mitigation hierarchy" that underpins the World Bank Safeguard Policies and International Finance Corporation (IFC) Performance Standards, offsets are considered a last resort--after efforts to avoid, minimize, and restore any significant damage to natural habitats still leave a significant residual adverse impact. Nonetheless, many infrastructure, extractive, and other large-scale

projects do have an inherently large footprint, where a biodiversity offset is warranted (and required by some funding entities). The World Bank Group (WBG) has an interesting history of supporting conservation offsets, which are sometimes needed to comply with the Bank's Natural Habitats (OP 4.04) and Forests (OP 4.36) Safeguard Policies, along with the IFC's Performance Standard (PS 6) on Biodiversity Conservation and Sustainable Management of Living Natural Resources. To date within the WBG, biodiversity offsets have been incorporated more regularly within single large infrastructure projects (such as hydroelectric dams) than within multiple agricultural or other projects with cumulative impacts upon natural habitats. Some IFC investments (particularly in extractive industries) also feature biodiversity offsets, although many large firms with the financial means to support substantial offsets are deterred by high transaction costs, due to the lack of a supportive legal and policy framework in the host country.

4. **Potential for Aggregate Offsets.** Biodiversity offsets can thus provide a means to manage some of the key environmental impacts of large-scale development projects in ways that ideally result in no net biodiversity loss. They can also make available substantial new funding for on-the-ground conservation and sustainable management of forests and other ecosystems. A key challenge is to systematize and scale-up biodiversity offsets through a national or other aggregated offset approach. This approach would help to overcome the limitations faced by many current, project-specific offset schemes, including the (i) rather high transaction costs that are often fully borne by each separate project; (ii) sub-optimal selection of conservation offset areas due to uncoordinated, ad-hoc approaches; and (iii) insufficient participation and ownership by governmental authorities in arrangements negotiated primarily between large private firms and conservation NGOs. The cumulative impacts of multiple (including smaller-scale) projects could also be more effectively addressed through an aggregate offset approach.

5. **Knowledge Sharing.** There is a need to bring together and disseminate operationally useful information on the considerable potential (as well as the limitations) of biodiversity offsets, at the project-specific and aggregate levels. This would facilitate the more widespread and appropriate use of this tool by governments, development agencies, and private firms, while helping to reduce the (now often prohibitive) transaction costs. The ongoing study seeks to address this need, by providing authoritative information and guidance on (i) what exactly are biodiversity offsets, in comparison with other tools for enhancing conservation outcomes in development projects; (ii) when are biodiversity offsets a useful and desirable option, compared with other tools; (iii) what are the minimum requirements and suitable enabling conditions for undertaking biodiversity offsets; (iv) what are the key characteristics of successful biodiversity offset schemes; (v) how to plan for and implement biodiversity offsets as part of standard project planning (including environmental impact assessments and project budgeting), in ways that reduce transaction costs; (vi) how to address social impacts and stakeholder concerns in the vicinity of conservation offset areas, so as to enhance (not undermine) the livelihoods and well-being of local populations; and (vii) the considerable potential benefits of establishing national-level or other aggregate offset programs.

Additional Background:

6. **Relevance to Bank and Clients.** This study is fully consistent with the World Bank Group's twin goals of ending extreme poverty and boosting shared prosperity, since well-

functioning biodiversity offsets enable large-scale infrastructure, extractive industries, and commercial agriculture to proceed in ways that maintain forests and other natural ecosystems, environmental services, and many rural livelihoods. The study is also of considerable relevance to the WBG's main clients, governments (World Bank) and private firms (IFC/MIGA). Many African and other governments are seeking to reconcile the desired expansion of extractive industries and commercial agriculture with protected areas (often important for tourism) and sustainable forest management. Biodiversity offsets provide an opportunity to address these distinct objectives together, in a spatially organized manner. Moreover, some large international extractive industry firms have both the desire and the financial means to support substantial conservation offsets, but are often deterred by the high transaction costs—which this study seeks to reduce by providing practical guidance, including information to facilitate the development of aggregate and other large-scale biodiversity offsets.

7. **Complementary Initiatives.** Owing to the recent high level of interest in biodiversity offsets, a variety of technical publications on the topic have recently been produced outside the WBG, including by the Business and Biodiversity Offsets Program (BBOP, part of the NGO Forest Trends), IUCN (aka World Conservation Union), and French Development Agency (AFD) among others. The ongoing study seeks to build upon—not duplicate—this previous work, by producing a concise Biodiversity Offsets Toolkit, a more detailed Sourcebook, and a Roadmap for two African countries. This study thus intends to provide user-friendly and operationally relevant guidance to WBG staff and clients (governments as well as private investors) on when and how best to design and use offsets.

Objectives of this Study:

8. The first main objective of this study is to facilitate the appropriate use of biodiversity offsets by making the needed information readily accessible to WBG staff and clients (along with other development practitioners), in sub-Saharan Africa as well as globally. The second main objective is to identify potential future actions that could lead to the establishment of an aggregate offset system within two pilot African countries (Liberia and Mozambique). To the extent that it provides timely information that facilitates the more effective use of biodiversity offsets, this study will help lead to cases of improved on-the-ground conservation of natural ecosystems.

Planned Outputs:

9. **Biodiversity Offsets Toolkit.** This study will produce a Biodiversity Offsets Toolkit and Sourcebook, along with pilot country Roadmaps for Liberia and Mozambique. The Toolkit and Sourcebook will provide an overview of biodiversity offsets and when and how best to use them. The more concise Toolkit will contain practical guidance for using biodiversity offsets as a tool (when appropriate) for environmental mitigation and natural habitat conservation, without the detailed analysis and case examples of the Sourcebook. The Toolkit will most likely take the form of a rather brief, glossy booklet with attractive photographs and informative captions to enhance its visual appeal and readability.

10. **Biodiversity Offsets Sourcebook.** The Sourcebook will provide in-depth analysis with illustrative examples, encompassing topics such as (i) definition and key elements of biodiversity offsets, in comparison with other types of conservation investments; (ii) suitability of using biodiversity offsets, including when offset use is not recommended; (iii) methodologies for assessing and calculating the adequacy and ecological equivalence of proposed offset schemes, taking into account principles such as "like for like" and "no net loss"; (iv) enabling conditions and incentives that can effectively promote offsets use, based on real-world experience; (v) a review of how biodiversity offsets have been used to date in WBG-supported projects (public and private); (vi) a global review of international practices with respect to offsets, with special focus on promising examples from developing countries (such as Colombia, Peru, Brazil, and Mongolia); (vii) advice on how to incorporate biodiversity offsets within project planning, such as sample language for the terms of reference (TOR) for environmental assessment (EA) studies, key elements of model legislation to promote aggregate or project-specific biodiversity offsets, and a checklist of the key conditions for successful offsets; (viii) opportunities for scaling-up biodiversity offsets, including through aggregate offset schemes, along with the constraints to doing so; and (ix) the main "pillars" which need to be in place for a viable national-level or other aggregated offsets system. These pillars include (i) identification, mapping, and legally gazetted the conservation offset area(s); (ii) a well-governed conservation trust fund or similar mechanism for receiving funds from the infrastructure, extractive, or other projects to be offset and applying the funds to the conservation areas; (iii) a supportive legal and regulatory framework that requires all large-scale public or private projects within specific categories to comply with offset requirements; and (iv) sufficient high-level government commitment.

11. **Country Roadmaps.** This study will produce two country-level Roadmaps to assess the potential for national-level or other large-scale biodiversity offset systems in terms of the above-mentioned pillars. Each of the two Roadmaps will be a separate volume, with key findings incorporated within relevant sections of the Toolkit and Sourcebook. The Roadmaps are intended to provide preliminary country examinations of legal and regulatory frameworks, national policies, land use plans, financial structures, and other relevant information. Each Roadmap would thus establish the information base for future dialogue within the country on aggregate biodiversity offsets. If a functional aggregate offset system were to be established within at least one developing country, it could provide a useful model for many other countries to consider adopting.

12. The two sub-Saharan African countries selected for Roadmap preparation under this study are:

a. **Liberia**, which has (i) important remaining stands of Upper Guinea forest, a highly threatened ecosystem with numerous endemic species; (ii) a boom in large-scale mining of iron ore, gold, and other metals, with a number of large-scale mining companies (IFC clients) expressing interest in biodiversity offsets; (iii) expressions of interest within Government (including Liberia's Environmental Protection Agency) in a potential aggregate biodiversity offset system; and (iv) a history of ad-hoc, NGO-supported biodiversity offsets which would benefit from full legal recognition and (where feasible) consolidation into a well-functioning aggregate offsets system; and

b. **Mozambique**, which has (i) extensive miombo and other woodlands and savannas, biologically unique moist forests on isolated mountains, and world-class mangroves and other coastal ecosystems; (ii) a boom in mining and hydrocarbons exploration; (iii) expressions of interest within Government (including MICOA, the Environment Ministry) in establishing a national-level offsets scheme; (iv) international conservation NGOs that have been discussing biodiversity offsets with Government and extractive industry officials; and (v) a planned French Development Agency (AFD) conservation project that could strengthen certain key pillars for aggregate offset establishment.

Intended Audience:

13. The intended audience for (and expected users of) the Conservation Offsets Toolkit, Sourcebook, and Roadmaps would include World Bank Group staff, along with government and private sector clients, other development practitioners, NGOs, and other interested stakeholders. Notwithstanding its special focus on sub-Saharan Africa in general (and Liberia and Mozambique in particular), this study is intended to provide generic guidance and insights that are likely to be of interest worldwide.

Study Team:

14. This study is being carried out by a team of biodiversity, environment, and extractive industry specialists, based primarily within the Environment, Natural Resources, Water, and Disaster Risk Management Unit of the Sustainable Development Department within the (sub-Saharan) Africa Region of the World Bank. The study team relies heavily on technical guidance from in-house advisors from different parts of the World Bank Group (including IFC), as well as from multiple external experts and interested stakeholders. With funding from the World Bank's Program for Forests (PROFOR), the study team expects to contract a small number of external, short-term consultants to help prepare the bulk of the Toolkit and Sourcebook, as well as the two country-level Roadmaps. Persons with suitable qualifications (including strong knowledge and interest in biodiversity offsets) who would like to be considered for such a consulting assignment should contact the study team members listed in the last paragraph of this Note.

Outreach and Dissemination:

15. **Stakeholder Outreach.** Preparation of the Biodiversity Offsets Toolkit, Sourcebook, and Country Roadmaps includes extensive outreach to interested stakeholders; this Public Information Note is part of that outreach. The Study Team is interested in the ideas and useful information that can be provided by many different stakeholders, including interested persons from any country. During preparation of the Toolkit and Sourcebook as well as the Roadmaps, members of the Study Team intend to provide periodic "work in progress" updates at suitable public venues. For each Country Roadmap, at least two stakeholder workshops are planned: One at the outset to help identify specific needs and priorities regarding biodiversity offsets (particularly at the aggregate level); the other to obtain feedback on the draft Roadmap report.

16. **Public Disclosure.** The completed Toolkit and Sourcebook are likely to be officially launched at an appropriate high-profile venue, such as an international conference. The two

completed Country Roadmap reports are expected to be publicized at specific events in Liberia and Mozambique. Draft versions of each Roadmap will also be discussed at in-country stakeholder workshops. Hard copies will be printed of the final Toolkit, Sourcebook, and Country Roadmap reports; the Mozambique Roadmap will likely also be printed in Portuguese. Each of these reports would also be permanently accessible (in PDF format or similar) on easy-to-find World Bank Group web sites.

17. **Public Input Welcome.** The Study Team welcomes constructive input from all interested persons. Please address any comments, or other information you wish to share with the team, to George Ledec (Team Leader and Lead Ecologist, Africa Region) gledec@worldbank.org, Douglas Graham (Co-Team Leader and Senior Environmental Specialist, Africa Region) dgraham@worldbank.org, and Kirsten Hund (Senior Mining Specialist) khund@worldbank.org.