

UN-REDD PROGRAMME POLICY BRIEF



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REDD+ and the 2020 Aichi Biodiversity Targets

Promoting synergies in international forest conservation efforts

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Key messages

- **Countries may wish to identify activities and areas where REDD+ and the Aichi Biodiversity Targets complement one another.** This Policy Brief outlines key options for and limitations on these synergies.
- **Action for REDD+ can help to achieve the Aichi Biodiversity Targets, and vice versa,** in many but not all cases. This is already illustrated by some national REDD+ work.
- **How these actions are planned and implemented is key** to determining to what extent synergies are achieved. Opportunities include shared priority-setting, land-zoning/planning processes, and appraisal of interventions for their impacts on both carbon and biodiversity.
- **If the Cancun safeguards are respected and addressed, this will increase the ability of REDD+ to contribute towards achieving the Aichi Biodiversity Targets.** The Cancun safeguards promote REDD+ actions consistent with the conservation of natural forests and biological diversity, and that effectively involve indigenous people and local communities, as well as addressing other important issues.
- **REDD+ implementation is not expected to contribute to the achievement of all the Aichi Biodiversity Targets,** since these are broader than forest and its role in climate change mitigation.
- **REDD+ could sometimes hinder the achievement of Aichi Biodiversity Targets** if pressure on forest land were displaced across national boundaries or into other ecosystems, unless such 'leakage' is prevented.
- **Joint planning for REDD+ implementation and achievement of the CBD Aichi Targets could help countries to develop cost-effective and complementary approaches to climate change mitigation and biodiversity conservation.**

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1. Introduction

Recognizing the multiple functions of forest, Parties to the United Nations Framework Convention on Climate Change (UNFCCC) and the Convention on Biological Diversity (CBD) have both initiated efforts to address the impacts of forest loss and degradation. Through the CBD, countries have agreed a set of “Aichi Biodiversity Targets”, including ambitious targets for the conservation, sustainable use and restoration of forests. Through the UNFCCC, countries are discussing a financial mechanism to promote REDD+ (reducing emissions from deforestation and forest degradation in developing countries; and the role of conservation, sustainable management of forests and enhancement of forest carbon stocks).

In October 2010, the Parties to the CBD adopted a time-bound framework for action on biodiversity in the form of the Strategic Plan for Biodiversity for the period 2011-2020 and its 20 Aichi Biodiversity Targets. The Targets cover objectives that range widely, from the conservation of marine and terrestrial ecosystems, through to access to genetic resources and the benefits arising

from their use, and these include the contribution to climate change mitigation and adaptation¹. These are global targets, but actions to achieve them are primarily implemented at the national, sub-national and local level. The Strategic Plan is translated to national circumstances through National Biodiversity Strategies and Action Plans (NBSAPs) developed by Parties to CBD.

The primary focus of REDD+ is climate regulation through reducing greenhouse gas emissions and increasing carbon sequestration by forests, but Parties have also agreed that REDD+ actions should take into account the multiple functions of forests and other ecosystems². This could involve considering both benefits and risks to these functions. REDD+ has the potential to achieve important benefits for biodiversity conservation and to secure the provision of ecosystem services, such as water regulation, soil erosion prevention and the provision of timber and non-timber forest products. REDD+ could also pose some risks to biodiversity. For example, if forests are protected from conversion to agriculture, but the drivers of conversion are not tackled, other ecosystems are likely to be threatened instead. The benefits and risks of any intervention will depend upon the type of REDD+ activity being

Box 1: REDD+ safeguards identified in Appendix I of Decision 1/CP.16²

When undertaking the activities referred to in paragraph 70 of this decision, the following safeguards should be promoted and supported:

- (a) That actions complement or are consistent with the objectives of national forest programmes and relevant international conventions and agreements;
- (b) Transparent and effective national forest governance structures, taking into account national legislation and sovereignty;
- (c) Respect for the knowledge and rights of indigenous peoples and members of local communities, by taking into account relevant international obligations, national circumstances and laws, and noting that the United Nations General Assembly has adopted the United Nations Declaration on the Rights of Indigenous Peoples;
- (d) The full and effective participation of relevant stakeholders, in particular indigenous peoples and local communities, in the actions referred to in paragraphs 70 and 72 of this decision;
- (e) That actions are consistent with the conservation of natural forests and biological diversity, ensuring that the actions referred to in paragraph 70 of this decision are not used for the conversion of natural forests, but are instead used to incentivize the protection and conservation of natural forests and their ecosystem services, and to enhance other social and environmental benefits;³
- (f) Actions to address the risks of reversals;
- (g) Actions to reduce displacement of emissions



undertaken, the approach to its implementation and the type and condition of forests involved⁴. **Figure 1** provides some examples of opportunities and risks for biodiversity.

Parties to the UNFCCC recognized the social and environmental benefits and risks of REDD+ in 2010, and agreed to promote and support a set of “Cancun safeguards” for REDD+ (**Box 1**). Safeguard (a) recommends that REDD+ actions complement or are consistent with the objectives of relevant international conventions and agreements, which includes the CBD. Safeguard (e) addresses biodiversity directly, asking that REDD+ actions are consistent with the conservation of natural forests and biological diversity. The most prescriptive part of this safeguard states that REDD+ activities are not [to be] used for the conversion of natural forests. If the safeguards are appropriately addressed, REDD+ should deliver multiple benefits with minimal risk.

This Policy Brief explores the scope for complementarities and synergies in actions under the two Conventions, and illustrates through case studies some ways in which developing countries have started to address these. The majority of developing countries have ratified both the UNFCCC and CBD, and therefore may voluntarily participate in REDD+ and have committed themselves to achieve progress towards the Aichi Biodiversity Targets. As recognized in CBD Decision XI/19⁵, it may be helpful for countries to consider how activities under REDD+ and those aimed at

achieving the Aichi Targets may complement one another, and to promote synergies between them (see **Box 2**). Ensuring that policies advance both sets of goals may be cost-effective in terms of financial expenditure and land allocation.

Where responsibilities for REDD+ and CBD implementation are held by different ministries (or departments within ministries), coordination of their efforts could help to enhance likely synergies and minimize any conflicts. This also applies to wider cross-sectoral coordination with ministries responsible for agriculture, energy, infrastructure and extractive resources. Coordination may be particularly fruitful during policy development, information-sharing and stakeholder consultations. Without coordination on policy, REDD+ decisions could place constraints on the range of options feasible for Aichi Biodiversity Target implementation, or vice versa. Complementary efforts on information collection, management and sharing could improve datasets on forests, biodiversity and on other national priorities that will influence land-use decisions. For example, some countries have undertaken a gap analysis of how well biodiversity priorities are covered by the existing protected areas system. The results could be of use in land-use planning for REDD+ that also delivers biodiversity conservation benefits.

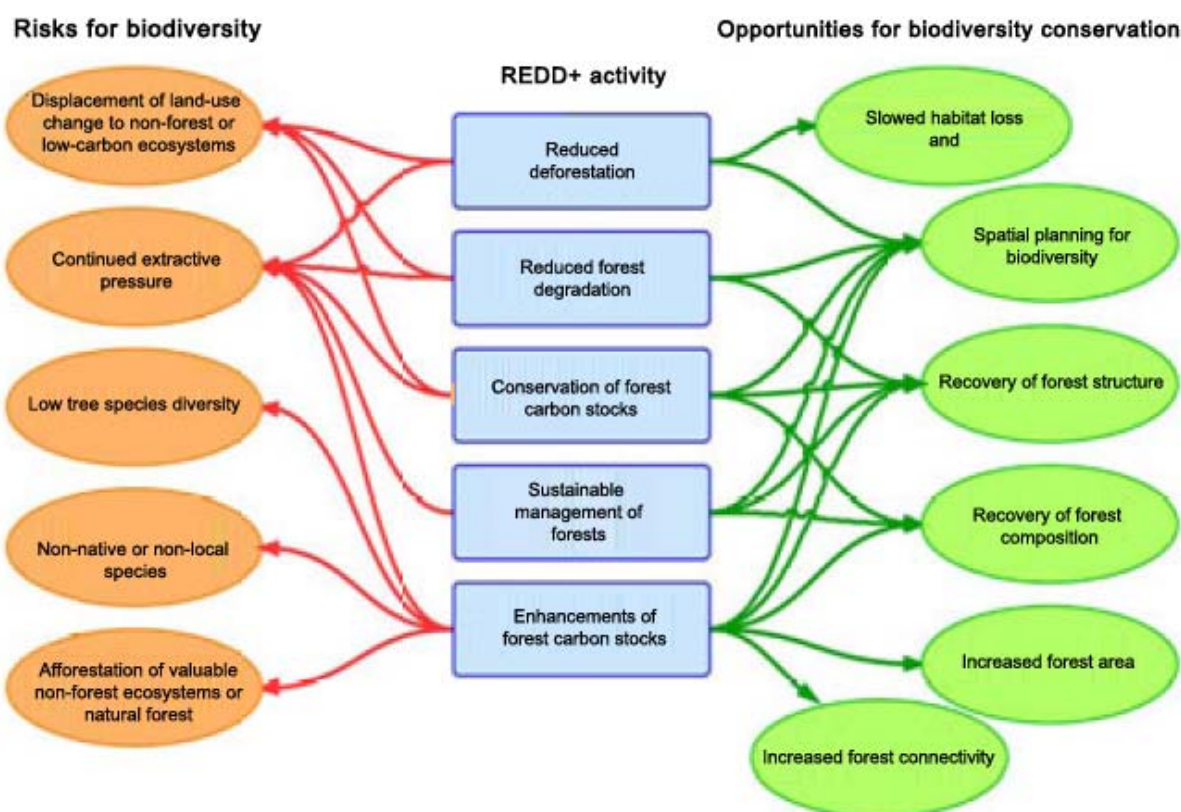


Figure 1: Major opportunities and risks for biodiversity conservation from the five REDD+ activities⁶; likelihood in each case will depend on approach to REDD+

Box 2: Establishing linkages between climate change mitigation planning and the Aichi Biodiversity Targets

The Philippines National REDD-Plus Strategy aims to build the adaptive capacity of communities and increase the resilience of natural ecosystem to climate change, and optimize mitigation opportunities towards sustainable development. It sets out three priorities—rural development, carbon sequestration and biodiversity conservation. It “assumes watershed, natural ecosystem and landscape-level approaches to REDD+ development in order to ensure multiple benefits”. To find out more about the strategy and the UN-REDD Programme in the Philippines, please see: www.un-redd.org/tabid/6897/Default.aspx

Under the REDD-PAC project funded by the German government’s International Climate Initiative (ICI), UNEP-WCMC is preparing to start work with Philippines stakeholders in late 2013 to explore the opportunities for using climate change mitigation actions such as REDD+ to make progress towards the 2020 Aichi Biodiversity Targets. This will involve: improving the understanding of the spatial distribution of biodiversity and ecosystem services in the country; demonstrating how such spatial data can be used to plan REDD+ activities that contribute to biodiversity conservation; and ultimately, assessing the possibility of using the results from the analyses in the identification of indicators to report on progress towards achieving the Aichi targets. The identification of links between REDD+ activities and the Aichi Biodiversity Targets during the planning stages of REDD+ in the Philippines may result in more resource-efficient approaches to forest conservation in the country, mutually supporting objectives under both Conventions.

Aichi Biodiversity Targets (CBD Decision X/2)	REDD+ elements (UNFCCC Decision 1/CP.16) (activities, guidance and safeguards)
5: By 2020, the rate of loss of all natural habitats, including forests, is at least halved and where feasible brought close to zero, and degradation and fragmentation is significantly reduced	<i>Reducing emissions from deforestation</i> <i>Reducing emissions from forest degradation</i> <i>Conservation of forest carbon stocks</i>
7: By 2020 areas under agriculture, aquaculture and forestry are managed sustainably, ensuring conservation of biodiversity	<i>Sustainable management of forests</i> REDD+ actions are to be consistent with conservation of natural forests and biological diversity and are to incentivize the protection and conservation of natural forests and their ecosystem services
11: By 2020, at least 17% of terrestrial areas are conserved through effectively and equitably managed, ecologically representative and well connected systems of protected areas	<i>Conservation of forest carbon stocks</i> <u>REDD+ activities should be consistent with the objective of environmental integrity and take into account the multiple functions of forests and other ecosystems</u>
14: By 2020, ecosystems that provide essential services, including services related to water, and contribute to health, livelihoods and well-being, are restored and safeguarded, taking into account the needs of women, indigenous and local communities, and the poor and vulnerable.	<i>Conservation of forest carbon stocks</i> <i>Enhancement of forest carbon stocks</i> REDD+ activities should promote and support full and effective participation of relevant stakeholders, in particular indigenous peoples and local communities
15: By 2020, ecosystem resilience and the contribution of biodiversity to carbon stocks has been enhanced, through conservation and restoration, including restoration of at least 15% of degraded ecosystems, thereby contributing to climate change mitigation and adaptation and to combating desertification.	<i>Reducing emissions from deforestation</i> <i>Reducing emissions from forest degradation</i> <i>Conservation of forest carbon stocks</i> <i>Sustainable management of forests</i> <i>Enhancement of forest carbon stocks</i>

Table 1: Key synergies between the five Aichi Biodiversity Targets considered here and the UNFCCC's REDD+ Decisions⁷

2. How do REDD+ and the Aichi Biodiversity Targets relate to one another?

This section considers each Aichi Biodiversity Target, and its potential synergies with REDD+ planning and implementation. In some cases, the CBD and UNFCCC objectives are very similar (e.g. reducing forest loss/reducing emissions from deforestation). In others, achieving one objective will make it easier to achieve others (e.g. enhancing forest resilience in line with Aichi Biodiversity Target 15 will decrease the risk of reversal of carbon savings

achieved by REDD+). **Table 1**, from a brochure jointly released by the Secretariats of the Conventions⁷, examines the relationship between REDD+ and the five Aichi Biodiversity Targets of most direct relevance. There are also complementarities with other Aichi targets - for example, if mangrove forest restoration were part of a country's REDD+ strategy, this could contribute to target 6 on the sustainable management of fish, invertebrates and aquatic plants. Here we focus on those targets listed in **Table 1**.

Aichi Biodiversity Targets

Target 5

By 2020, the rate of loss of all natural habitats, including forests, is at least halved and where feasible brought close to zero, and degradation and fragmentation is significantly reduced

There is a clear correspondence between the target of reducing loss of natural forest and reducing emissions from deforestation and degradation. For example, tropical moist forests contain high levels of carbon per hectare; actions towards achieving Target 5 and those aiming to achieve REDD+ would be mutually supportive. However, if the drivers of habitat loss, degradation and fragmentation are not tackled, there is a risk that processes such as agricultural expansion may shift from forests to other natural habitats, or to forests that are not the focus of REDD+ activities.

Whenever the reality is that policy implementation will reduce rather than instantly halt deforestation, there is an opportunity to design that policy to preferentially protect forest important for biodiversity conservation, either because of the species present or its role in connecting other patches of natural habitat.

Countries may wish to focus on retaining these high value forests when setting priorities for REDD+ action. This might involve choosing pilot areas for early action, or prioritizing REDD+ investment that is of necessity limited over the long term. The potential biodiversity benefits will need to be weighed against

other costs and benefits of selecting different areas, including the outcomes for climate mitigation.

Both NBSAP and REDD+ planning require information on past trends in forest extent and condition, information on drivers of forest loss, degradation and fragmentation, and plans for addressing these drivers. In addition, an understanding of the relative carbon and biodiversity values of forest can inform decisions on priorities for action. The UN-REDD Programme has assisted countries such as the Democratic Republic of the Congo⁸, Indonesia⁹, Nigeria¹⁰ and Tanzania^{11, 12} in mapping the relationship between biodiversity and forest carbon stocks (see **Box 3**), as well as information on pressures, other values and potential zones for REDD+ actions.

Target 7

By 2020 areas under agriculture, aquaculture and forestry are managed sustainably, ensuring conservation of biodiversity

Measures to support sustainable and more efficient production and consumption of forest products will often contribute towards both CBD and REDD+ goals. There is much existing work on forest management that delivers both carbon and biodiversity benefits, such as the guidelines developed by ITTO and IUCN¹³, but additional country-specific studies could be useful. For example, in timber production, forest management approaches could be evaluated that promise to reduce carbon emissions and improve sequestration, by favouring the growth of high-biomass



Box 3: Using spatial information to support decisions on safeguards and multiple benefits for REDD+ in Tanzania

The Government of the United Republic of Tanzania has been involved in REDD+ since 2008, when it received bilateral financial support from Norway to commence the Tanzania REDD+ Initiative. Multilateral support from the UN-REDD Programme since 2009 has enabled Tanzania to launch its UN-REDD National Programme.

In 2013, the Government developed two documents that recognized the importance of the Cancun safeguards and of considering multiple benefits when planning for REDD+. The National REDD+ Strategy (www.reddtz.org) states that the implementation of REDD+ activities will be carried out in accordance with the Cancun safeguards. The draft national REDD+ Safeguards document states that REDD+ activities are to be designed to maintain or enhance biodiversity and ecosystem services. It also notes that the REDD+ initiative needs to conform to all international, social, environmental, cultural and human rights treaties, conventions and agreements that have been ratified by Tanzania.

In the first half of 2013, the UN-REDD Programme supported members of the Tanzania Forest Service, Sokoine University of Agriculture and the Forestry Training Institute - Olmotonyi by building their capacity to undertake mapping and spatial analysis. The maps developed aim to support assessments of the potential for multiple benefits of REDD+ implementation at the national scale, and contribute to REDD+ plans, taking the safeguards into account. Many of the maps developed are relevant to the Aichi Biodiversity Targets. For example, mapping the distribution of important wildlife corridors may help to identify forests that are valuable for connecting otherwise separate areas of natural habitat (Figure 2). For more on the UN-REDD Programme in Tanzania, please see: www.un-redd.org/tabid/1028/Default.aspx

forest types, minimizing wood waste during harvest, reducing damage to soils and trees by applying reduced-impact logging, and fostering rapid recovery of carbon stocks after harvest or other disturbance. There can be trade-offs between the speed and volume of carbon sequestration and biodiversity conservation¹⁴: interventions problematic for biodiversity could include planting fast-growing trees of non-native species, and elimination of understorey growth to discourage competition with saplings. The relevant Cancun safeguards address the conversion of natural forests to planted forests, as well as urging that REDD+ actions are consistent with biodiversity conservation (Table 1).

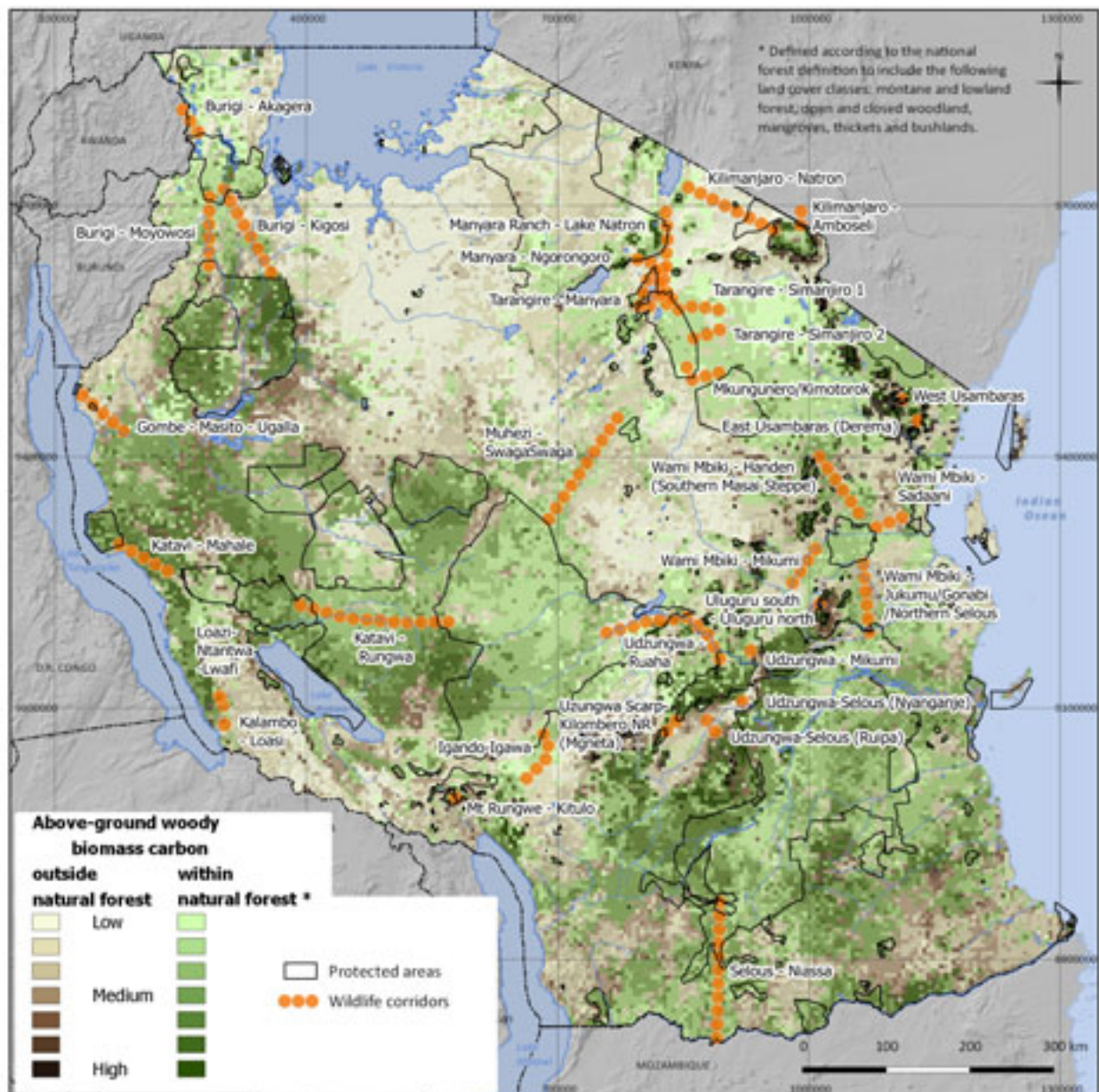
Shared development of forestry policies under NBSAPs and REDD+ could help to promulgate best practice, such as reduced-impact logging, which can halve carbon losses in comparison to logging by untrained and unsupervised crews¹⁵. REDD+ could have especially positive impacts on biodiversity if it involved improvements in practice in logging concessions where high biodiversity value coincides with intensive or unsustainable management.

Target 11

By 2020, at least 17% of terrestrial and inland water, and 10% of coastal and marine areas, especially areas of particular importance for biodiversity and ecosystem services, are conserved through effectively and equitably managed, ecologically representative and well connected systems of protected areas and other effective area-based conservation measures, and integrated into the wider landscapes and seascapes

Aichi Biodiversity Target 11 calls for both the expansion of the protected area network, and for protected areas to be managed effectively and equitably; whilst the Cancun safeguards ask that REDD+ actions “incentivize the protection and conservation of natural forests and their ecosystem services”. ‘Conservation

This map shows the location of some important corridors in Tanzania where natural vegetation facilitates the movement of wildlife between protected areas. Wildlife migration corridors enable long-term health of protected ecosystems, extending the habitat of species and allowing the gene pools of different populations to mix. Many of the corridors on the map are threatened from agriculture, livestock keeping and other activities. REDD+ activities for forest rehabilitation or protection could help to preserve these crucial areas.



Data Sources:
 Natural forest: NAFORMA, 2013, NAFORMA land-use/land-cover Map 2010.
 Woody biomass carbon: NAFORMA, 2013, NAFORMA woody biomass only, 5km preliminary dataset based on field data.
 Wildlife corridors: based on information provided at twildlifecorridors.org. Accessed May 2013.
 Forest reserves: Tanzania Forest Service, 2013, Forest Reserves of Tanzania.
 Protected areas: IUCN and UNEP-WCMC (2010), The World Database on Protected Areas (WDPA) Cambridge, UK: UNEP-WCMC. Available at: www.protectedplanet.net.

Map projection: WGS84/UTM Zone 36S
 Map prepared by: Tanzanian Forest Service (TFS), UNEP-WCMC, FAO, Sokoine University of Agriculture (SUA) and Forestry Training Institute (FTI).
 Date: May 2013

Figure 2: Important wildlife corridors in relation to protected areas, natural forest and woody biomass carbon stocks

of forest carbon stocks' has a different aim to biodiversity conservation, but there is a clear opportunity for synergy.

Establishing, enlarging and improving the management effectiveness of forest protected areas may be an effective option for REDD+. Whilst designation alone can confer some protection from deforestation, without sufficient investment in management, significant forest carbon loss can still occur^{16, 17}. Protected area investments are already included in some countries' plans for REDD+¹⁸.

Financial support for conservation of carbon stocks in intact forests could be particularly important to REDD+ eligible countries with high forest-carbon stocks and low deforestation rates. If there is no incentive for these countries to continue to retain their forest, the risk of international leakage to these countries would threaten the global success of REDD+ in climate mitigation.

Options for meeting this Aichi Biodiversity Target and conserving carbon stocks include:

- Designating protected areas in forests that are of particular importance for biodiversity and ecosystem services, or include forest types that are currently under-represented in protected area systems
- Designating areas to increase connectivity between patches of natural habitat.
- Making use of protected area categories that allow local land uses compatible with conservation, such as community conserved areas or indigenous areas¹⁹. This would be compatible with the Cancun safeguards on the rights and participation of indigenous and local people, as well as the CBD objective that areas are managed equitably.

Protected area designation and improved management can form only part of a successful REDD+ strategy. If deforestation is reduced within a protected area, but there is no direct action to address land-use change pressures, the result may be increased deforestation elsewhere instead²⁰. This 'leakage' problem applies to any site-based REDD+ project, and is a risk unless there is simultaneous action to limit the drivers of deforestation, or a high proportion of a country's threatened forests fall within protected sites. However, it is a part that can be relatively straightforward to put in place, because many countries already have sufficient legal and institutional frameworks for site designation and management²¹.

Useful lessons on the success of site management approaches could be drawn both from the experience of local communities that have been participating in REDD+ projects, including within the voluntary carbon market²² and from assessments of protected area effectiveness carried out under the CBD Programme of Work on Protected Areas.

Target 14

By 2020, ecosystems that provide essential services, including services related to water, and contribute to health, livelihoods and well-being, are restored and safeguarded, taking into account the needs of women, indigenous and local communities, and the poor and vulnerable

The most directly relevant REDD+ activities to the restoration and safeguarding of essential (forest) ecosystem services are the enhancement and conservation of forest carbon stocks (**Table 1**). There is a clear link to the REDD+ safeguard on incentivizing the protection and conservation of natural forests and their ecosystem services. The CBD target also covers other ecosystems, and countries may wish to dedicate particular conservation efforts to ensuring that these are protected from any displaced land-use change resulting from reduced deforestation.

Understanding local priorities and needs, and clarification of land tenure and other rights can be key to ensuring that interventions are fair and effective and that their benefits are equitably shared. Both Conventions emphasize the importance of participation of stakeholders, and the views of local and indigenous peoples are key to identifying those services that are essential to human well-being, such as flood regulation or non-timber forest product provision. Women in particular can play a crucial role in the sustainable management of ecosystem services. Local use and knowledge of forests and non-timber forest products is often heavily differentiated by gender, so it is necessary to identify the ecosystem services used by both women and men. By ensuring that REDD+ protects or restores the services valued locally, the sustainability of REDD+ efforts can be also increased and the risk of reversals reduced.

Community consultations on the definition of essential services and spatial analyses on their distribution may both be carried out for REDD+ or for CBD purposes, and so the responsible country agencies have the opportunity to share results and avoid duplication. For example, the UN-REDD Programme has been supporting certain countries in participatory priority-setting for multiple benefits (see **Box 4**), on developing maps of specific ecosystem services⁹, and on identifying opportunities for forest restoration⁹ (UN-REDD Programme work is also underway for Paraguay).

Target 15

By 2020, ecosystem resilience and the contribution of biodiversity to carbon stocks has been enhanced, through conservation and restoration, including restoration of at least 15% of degraded ecosystems, thereby contributing to climate change mitigation and adaptation and to combating desertification

This is the only Aichi Biodiversity Target that explicitly references the role of ecosystems in climate regulation through carbon sequestration and storage. In highlighting the importance of resilience of ecosystems to maintain carbon stocks, it is aligned with the Cancun safeguard on reducing risks of reversals. It also clearly references the dual role of ecosystem resilience for mitigation and adaptation. Resilience of forest carbon stocks to climate change is essential for the long-term viability of REDD+. A UN-REDD Programme review found strong evidence that intact forest ecosystems are more resilient than those that are degraded or fragmented²³. Hence intact forests maintain more carbon over longer time periods, and so reducing forest degradation makes a contribution to achieving this Aichi Biodiversity Target. There is some evidence to suggest natural forests may be more resilient than plantation forests, meaning that implementing REDD+ in accordance with the Cancun safeguard on natural forest will also support achievement of this Target. Field trials of potential methods to enhance the resilience of forest ecosystems could be of great use to both REDD+ and CBD implementation.

Whilst all the REDD+ activities are relevant (**Table 1**), enhancement of forest carbon stocks may contribute most to the quantitative

target for ecosystem restoration. The resilience of these new forest carbon stocks to climate change and extreme events can be increased by selecting reforestation approaches that result in ecosystems with more natural features (such as diverse, mixed age stands in tropical forest), and selecting locations that connect to existing areas of natural forest. This connectivity could facilitate the movement of animal and plant species in line with shifting climatic conditions, and recolonization where species populations have been lost as a result of extreme events or other pressures^{24, 25}.

The Global Partnership for Forest Landscape Restoration (GPFLR) is leading a global effort to restore 150 million hectares of degraded forest landscapes by 2020, which would have an estimated benefit for rural livelihoods of more than 80 billion USD per year²⁶.

3. Options for enhancing synergies

Many stakeholders, including government ministries, civil society, indigenous peoples and local communities, can help to ensure that REDD+ and biodiversity actions are mutually supportive. In particular, REDD+ and NBSAP decision makers may find it useful to consider the following options:

- Promoting inter-sectoral co-ordination: CBD and REDD+ focal points and implementing agencies may wish to communicate and consult with each other on information sharing, policy development and implementation.
- Considering existing national processes and guidelines on forests and biodiversity when developing REDD+ national strategies, in particular on how to address and respect the relevant safeguards.
- Taking into account NBSAP commitments in REDD+ planning and implementation; for example by identifying those forests where biodiversity conservation would be most beneficial.
- In NBSAP planning and implementation, identifying and highlighting potential contributions from REDD+ activities, as well as the risks they may pose.
- Making available information on benefits or possible harm to biodiversity as a result of REDD+ actions to REDD+ decision-makers, as a basis for adapting plans and implementation in order to promote and support the Cancun safeguards.



Acknowledgements

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Endnotes

¹ Useful steps that might be taken to implement the targets and measure progress towards their achievement may be found in: CBD 2013. "Quick Guides for the Aichi Biodiversity Targets." Convention on Biological Diversity. <https://www.cbd.int/nbsap/training/quick-guides/>

² See UNFCCC/CP/2010/7/Add.1: Decision 1/CP.16

³ Taking into account the need for sustainable livelihoods of indigenous peoples and local communities and their interdependence on forests in most countries, reflected in the United Nations Declaration on the Rights of Indigenous Peoples, as well as the International Mother Earth Day

⁴ SCBD. REDD-plus and Biodiversity. CBD Technical Series 59. Montreal, Canada: Secretariat of the Convention on Biological Diversity, 2009. <http://www.cbd.int/doc/publications/cbd-ts-59-en.pdf>

⁵ CBD Decision XI/19 (UNEP/CBD/COP/DEC/XI/19) "urges Parties, other Governments, and relevant organizations to fully implement the relevant provisions and decisions of the Convention on Biological Diversity and the United Nations Framework Convention on Climate Change in a coherent and mutually supportive way". Parties are also invited to strengthen their efforts to provide benefits for biodiversity and indigenous peoples and local communities and achieve the CBD objectives through REDD+ activities by "building synergies between national biodiversity strategies and action plans, and [REDD+] national strategies or action plans".

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¹¹ Miles, L., Kabalimu, K., Bahane, B., Ravilious, C., Dunning, E., Bertzky, M., Kapos, V., Dickson, B. Carbon, biodiversity and ecosystem services: exploring co-benefits. Tanzania. Dar es Salaam, Tanzania: UN-REDD Programme (Prepared by UNEP-WCMC, Cambridge, UK & Forestry and Beekeeping Division, Ministry of Natural Resources and Tourism, Dar es Salaam), 2009. <http://www.un-redd.org/tabid/5954/Default.aspx>

¹² Runsten, L., Ravilious, C., Kashindye, A., Giliba, R., Hailakwahi, V., Kashaga, L.R.A., Khalid, S., Mbilinyi, B., Mwampashi, Y., Pastory, M., Mant, R., Osti, M., Crête, P., Pekkarinen, A., Leppanen, M. & Miles, L. Using spatial information to support decisions on safeguards and multiple benefits for REDD+ in Tanzania. Cambridge, UK: prepared by UNEP-WCMC; Dar es Salaam, United Republic of Tanzania, published by Ministry of Natural Resources & Tourism. In prep.

¹³ ITTO & IUCN. ITTO/IUCN guidelines for the conservation and sustainable use of biodiversity in tropical timber production forests. ITTO Policy Development Series 17. Yokohama, Japan: International Tropical Timber Organization and International Union for the Conservation of Nature, 2009. http://www.itto.int/direct/topics/topics_pdf_download/topics_id=1918&no=0

¹⁴ Miles, L., Kapos, V. & Dunning, E. Ecosystem services from new and restored forests: tool development. Multiple Benefits Series 5. Cambridge, UK: UNEP-WCMC (prepared on behalf of the UN-REDD Programme), 2010. <http://www.un-redd.org/tabid/5954/Default.aspx>

¹⁵ Sasaki, N., Putz, F.E. "Critical need for new definitions of "forest" and "forest degradation" in global climate change agreements" *Conservation Letters* 2. 5 (2009): 226-232.

¹⁶ Achard, F., Eva, H.D., Stibig, H-J, Mayaux, P., Gallego, J., Richards, T. & Malingreau, J-P. "Determination of Deforestation Rates of the World's Humid Tropical Forests" *Science* 299. 5583 (2002): 999-1002.

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¹⁸ e.g. Indonesia National REDD+ Strategy, Paraguay R-PIN Annex 6, 2008; DRC R-PP, 2010

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