

# New Forests' Submission

To Verra consultation, November 2023

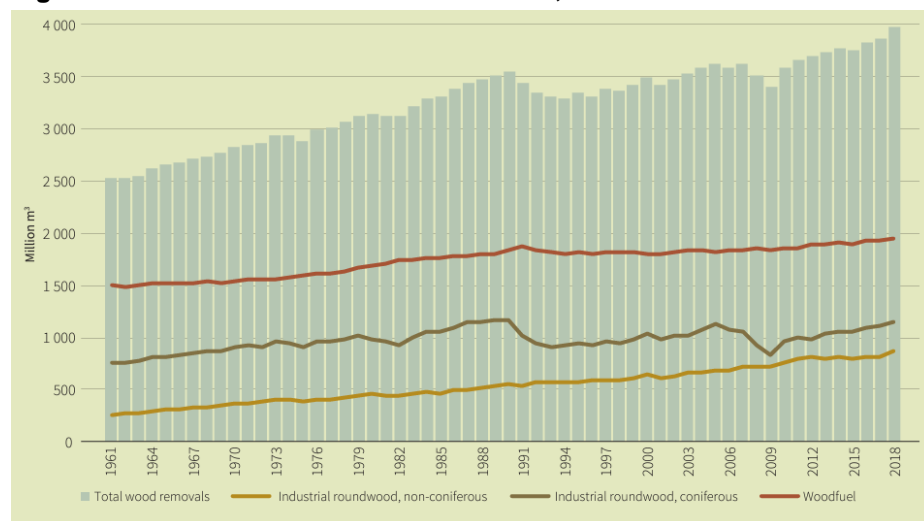
## 1) In your opinion, should using non-native monocultures be an eligible activity for generating carbon credits? Please justify your response.

Yes, provided invasive species are precluded, as suggested in the draft Standard 4.5.

Given the increasing demand for wood fibre worldwide (Figure 1) and anticipated upward trajectory in demand (e.g., FAO, 2022<sup>1</sup>) with population growth and GDP per capita, plantations that comprise native or non-native monocultures protect biodiversity by providing timber / wood fibre that would otherwise be sourced from the selective harvest or clearance of natural forests (and note that selective harvest often leads to degradation and ultimate clearance).

Plantation species selection is based on a range of factors, including growth/yield and associated rotation duration, tree form, branch size and angle, disease and fire resistance, distance to processing and end market, market demand, and management costs associated with silvicultural application. The financial viability of commercial operations often requires the establishment of monoculture plantations comprising non-native species. Given the rapid growth of many cultivars currently in use by commercial operators, these plantations rapidly sequester carbon (e.g. Waring et al, 2020<sup>2</sup>, Harris et al, 2021<sup>3</sup>). Studies that compare sequestration and carbon storage in mixed species versus monoculture plantations are of little value to plantation managers without parallel analyses of the factors that drive long-term financial viability of the plantation operations.

**Figure 1. Global Trends in Wood Removals, 1961-2018**



\*Sourced from FAO Global Forest Resources Assessment 2020, main report.

The commercial forestry operators that replace only highly degraded vegetation with low carbon stocks further enhance biodiversity protection by avoiding conversion of natural habitat or intact forest. Carbon finance provides

<sup>1</sup> FAO. 2022. Global forest sector outlook 2050: Assessing future demand and sources of timber for a sustainable economy – Background paper for The State of the World's Forests 2022. FAO Forestry Working Paper, No. 31. Rome. <https://doi.org/10.4060/cc2265en>

<sup>2</sup> Waring et al, 2020. Forests and Decarbonization – Roles of Natural and Planted Forests. Frontier for Global Change, 08 May 2020. Sec. Forest and the Atmosphere. Volume 3 – 2020. <https://doi.org/10.3389/ffgc.2020.00058>

<sup>3</sup> Harris, N.L., Gibbs, D.A., Baccini, A. et al. Global maps of twenty-first century forest carbon fluxes. *Nat. Clim. Chang.* 11, 234–240 (2021). <https://doi.org/10.1038/s41558-020-00976-6>

an opportunity for those that operate under a more environmentally and socially sustainable manner (e.g., Forest Stewardship Council Forest Management certified) to better compete with those that intensively clear and convert natural forests or other ecotypes.

We recommend that Verra consider alignment with FSC, the Programme for Endorsement of Forest Certification (PEFC) for sustainable forest management and consider inclusion of applicable conservation and restoration components of the International Finance Corporation (IFC) Performance Standards and / or ADB Safeguard Policy Statement to incorporate best management practices that have evolved significantly over time and seek to provide for environmental and social sustainability in a manner that is financially achievable.

The costs associated with operating under a more environmentally and socially sustainable manner (e.g., overhead costs, opportunity costs, biodiversity protection and enhancement, livelihoods programs, certification audits) have never been routinely matched by an enhanced product value for certified timber. This competitive imbalance with operations that maximize ecosystem clearance and conversion to intensive monoculture plantations may be at least partially offset by carbon finance.

Whether native or non-native, the plantations themselves are typically not of high biodiversity or habitat value. The critical factors in determining whether plantations protect and enhance biodiversity value are (a) the level of vegetative degradation (or otherwise) converted to plantation and (b) the approach to the greater landscape within which the plantation resides, with consideration to conservation and/or restoration.

New Forests agrees with the proposed approach of allowing non-native monocultures, provided these replace degraded areas / intensive agriculture and require some level of conservation / restoration of natural habitat within the landscape, assuming VCU's may be generated from both to offset some of the costs.

**2) The area limit intends to allow smallholders to undertake projects that include non-native monocultures, as these projects are unlikely to have significant negative ecosystem impacts. Is 100 ha an appropriate limit for project activity instances that use non-native monocultures? If not, is a smaller area more appropriate? Please justify.**

This area is an appropriate limit for single household or individual smallholders, but collectives or otherwise aggregated smallholders would be left out and the overall impact of this sector would be restricted.

In some regions communal land still exists. Community plantation operations are in effect an aggregate of smallholders, with land use decisions typically voted on across village representatives, and each family in the community owning a share. These community forests may significantly exceed 100 ha in our experience.

The most significant constraint to implementing plantation forestry in smallholder or communal village production forest is the length of rotation. The individual / community is less incentivised to implement a plantation wherein they see financial returns only at the end of rotation, and instead turn to cash crops (cassava being a prime example now in SE Asia) due to the annual revenue. The associated negative impacts include (a) enhanced harvest of natural forests to meet timber needs; (b) soil degradation / nutrient loss, erosion, and soil carbon loss from intensive farming; and (c) lower levels of carbon sequestered and maintained in a landscape.

The annual or periodic revenue from carbon finance has the potential to provide the incentive necessary to expand such operations, for communities as well as individual smallholders.

**3) To be eligible to plant non-native monocultures, should a project need to meet both conditions (1) and (2) in the proposed 3.19.28? Please justify why or why not.**

Yes, the project proponent should meet both conditions, however the 30% restoration requirement should be reduced. While dedicating some portion of the project area to native forest ecosystem restoration will be costly, and potentially cost prohibitive for developing the project under the 30% scenario, dedicating area to natural habitat conservation and / or restoration is part of the landscape approach to forestry that we vigorously support and currently implement.

Plantations should only be established on degraded landscapes, whether they comprise native or non-native crops. Protecting intact high biodiversity values is a critical component of sustainable commercial forestry.

**4) We propose that at least 30% of the project area be dedicated to native ecosystem restoration. In your opinion, is this an appropriate minimum restoration threshold? If not, what percentage of land should be dedicated to native ecosystem restoration? Please provide your rationale for the suggested amount.**

We propose that active restoration of 10% is a more reasonable expectation and aligns with FSC's forest management certification 10% conservation area requirement. Enhancing the obligation to include active restoration instead of what is currently a conservation requirement would generate improved outcomes.

Native ecosystem restoration is expensive, and a 30% restoration requirement would make many ARR projects and likely the plantation operations that underpin them unviable. Cost-benefit analysis may rule out acquisitions by sustainable forestry practitioners, many of which struggle to remain viable having the 10% set-aside under FSC requirements.

Conservation area should be considered as part of the obligation if such a large proportion of the project area is deemed appropriate. A 10% restoration: 20% conservation / natural regeneration ratio may be more achievable for plantation operators.

**5) Should legally mandated conservation land be counted toward the 30 percent requirement for native ecosystem restoration? Explain your rationale.**

Yes, where warranted. Without exception, the restoration site(s) should be selected based on biophysical and often social attributes, such as potential to create habitat connectivity; enhance high conservation values by providing buffer; restore riparian area; avoid competing land uses with community, highly accessible areas, and additional factors that require consideration. By mandating an area that cannot be included, the area most suited to restoration may be excluded and opportunity for enhancement lost.

For example, legally prescribed conservation areas are often riparian areas and in emerging markets these are also often degraded. Fully functioning riparian vegetative communities protect water quality, enhance aquatic biodiversity, provide for habitat connectivity and migration pathways due to their somewhat linear nature, and are often more unique and complex habitat types than neighbouring upland sites. If legally protected but degraded riparian areas are excluded from restoration activity, the net benefits of the program would be reduced.

**6) What data sources for land classification (e.g., government data, peer-reviewed scientific literature) should be allowed to demonstrate that projects occur on lands considered degraded or under intensive agriculture?**

Government data and peer-reviewed literature should be allowed, but in many areas will be non-existent or outdated at the scale needed, particularly in areas such as Southeast Asia, where research in remote areas is less frequent due to logistical and financial constraints in often remote and isolated areas. A host of potential projects would likely be excluded from ARR activities in the emerging countries that we operate in.

Further means to demonstrate degradation or agriculture should be allowed. This could include ongoing use of 'expert judgement', time series of satellite imagery, management plans stemming from third-party surveys for biodiversity, natural habitat, critical habitat or high conservation values assessments provided these provide independent delineation of land uses and degradation level across the applicable timeframe required for VCS.

**7) Is the definition of "intensive agriculture" appropriate, or is there another definition that would be more appropriate? Please explain your suggestion. Is there another threshold, test, or condition in which introducing non-native monoculture(s) would be appropriate in the context of ARR and WRC projects in the VCS Program to ensure ecosystem health is protected?**

The definition of intensive agriculture is appropriate, but it is difficult to understand why this limitation is necessary.

Intensive agriculture will not capture the range of agricultural practices (or other land use practices) that lead to significant and ongoing vegetative degradation or otherwise low productivity from a carbon sequestration / storage standpoint.

Many areas used for intensive or extensive livestock grazing for example are burned annually in Southeast Asia to promote fresh herbaceous growth for fodder; are subjected to compaction, erosion and sediment transport; have limited shrub and herbaceous layers with associated low biodiversity value; and continue to support low carbon stocks even decades after initial forest clearance. Livestock grazing and potentially other examples of extensive agriculture should be eligible, where evidence of ongoing degradation can be substantiated.