

# Natural forest values for sustainable income generation: the Basket of Benefits approach

Research informing Policy Briefing Note 2/24

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## KEY INSIGHTS

- The dominance of industrial extraction from natural forests is at odds with the science of the climate and biodiversity crises.
- The multiple ecosystem benefits of natural forests are undervalued because of the focus on the economic benefits derived from industrial timber and wood pulp extraction, mining, and agriculture.
- As a result, natural forest loss and damage are still increasing in many regions of the world, particularly in primary forests, which is unsustainable.
- Efforts to generate sustainable incomes from forests, through carbon finance and other payments for ecosystem services, have often had negative ecosystem impacts and have struggled to achieve social benefits.
- Conventional approaches to sustainable finance do not embed strong governance and effective planning that protect forest ecosystem integrity, as seen in recent reporting and analysis of carbon project failures.
- The Basket of Benefits approach offers a framework for assessing the full range of natural forest values. The approach supports just benefit sharing and forest protection, based on an understanding of ecosystem integrity and full recognition and valuation of their ecosystem services.

## WHY IS THIS IMPORTANT?

Protecting natural forests, especially primary forests,\* is essential for addressing the climate and biodiversity crises.<sup>2,3</sup> Forest stewards, particularly Indigenous groups and communities in developing countries, seeking resources for improved wellbeing are often presented little choice, with 'conservation' and 'development' presented as incompatible pathways. Industrial activities that enable primary forest loss and degradation through conventional forest management for commodity production remain the dominant development options.<sup>4</sup> Carbon finance and similar payments for ecosystem services (PES) provide a potential pathway to sustainable finance that support primary forest protection.<sup>5</sup> However, these schemes do not consider ecosystem integrity, nor effectively account for the multiple ecosystem service benefits and costs of management that accrue at different spatial and time scales. As a result, they can lack integrity in terms of environmental, social, and economic outcomes, as highlighted by recent concerns over carbon credit schemes.<sup>6-10</sup> Given the significant and growing financing that these schemes are attracting, this lack of integrity means there is a growing risk of: economic exploitation of forest stewards, forest

loss and damage, loss of confidence of investors and other stakeholders, and consequent failure to achieve real carbon and biodiversity targets. The Basket of Benefits approach seeks to address these issues, protecting forest ecosystem integrity, while maximising just benefit sharing.

## BACKGROUND

Widespread and accelerating industrialisation and globalisation has resulted in focus on extractive industrial activities in primary forests, driven by the timber, plantation, agriculture, and mining sectors, resulting in forest loss and degradation.<sup>4</sup> In contrast, local communities have long acted as forest stewards – managing the forest landscape to provide food, fibre and fuel sustainably, with forests often central to their culture.<sup>11-13</sup> However, these stewards incur costs (including loss of opportunities) because many of the forest benefits their management generates are global and regional in scale, do not have clear property rights, and are thus not represented in market prices; these include biodiversity benefits, globally significant carbon stocks, water regulation, and helping quarantine potential pandemic-risking pathogens.<sup>14</sup> Traditional approaches to conservation, on the other hand, are seen as 'locking up' forest resources and provide limited opportunities for improving livelihoods.

A variety of mechanisms exist to try and promote forest management in ways that improve livelihoods for forest stewards, while preventing forest loss and degradation.

Forest certification aims to encourage extractive logging that reduces ecosystem damage, relative to clear cutting, using reduced impact logging models, but can still result in significant forest degradation.<sup>15,16</sup>

Non extractive mechanisms that can operate within the regenerative capacity of the forest include:

- non-timber forest products, ecotourism and eco-labelling;
- payments for ecosystems services; and
- some forest carbon mitigation schemes, including REDD+ (reducing emissions from deforestation and degradation), although some REDD+ projects are also extractive via reduced impact logging models (see e.g. **VERRA's Improved Forest Management Methodology**)

A weakness of the non-extractive models is that they do not provide information to help understand trade-offs nor provide effective decision support for benefits sharing that is just. They struggle to recognise, demonstrate, and capture<sup>17</sup> the multiple benefits of primary forest ecosystem services. They also largely impose top-down, often complex, governance requirements on forest stewards, adding additional burdens that result in the need

\*Primary forests are forests not subject to management for commodity production and other industrial scale commercial uses and whose structure and function are dominated by natural processes.<sup>1</sup>

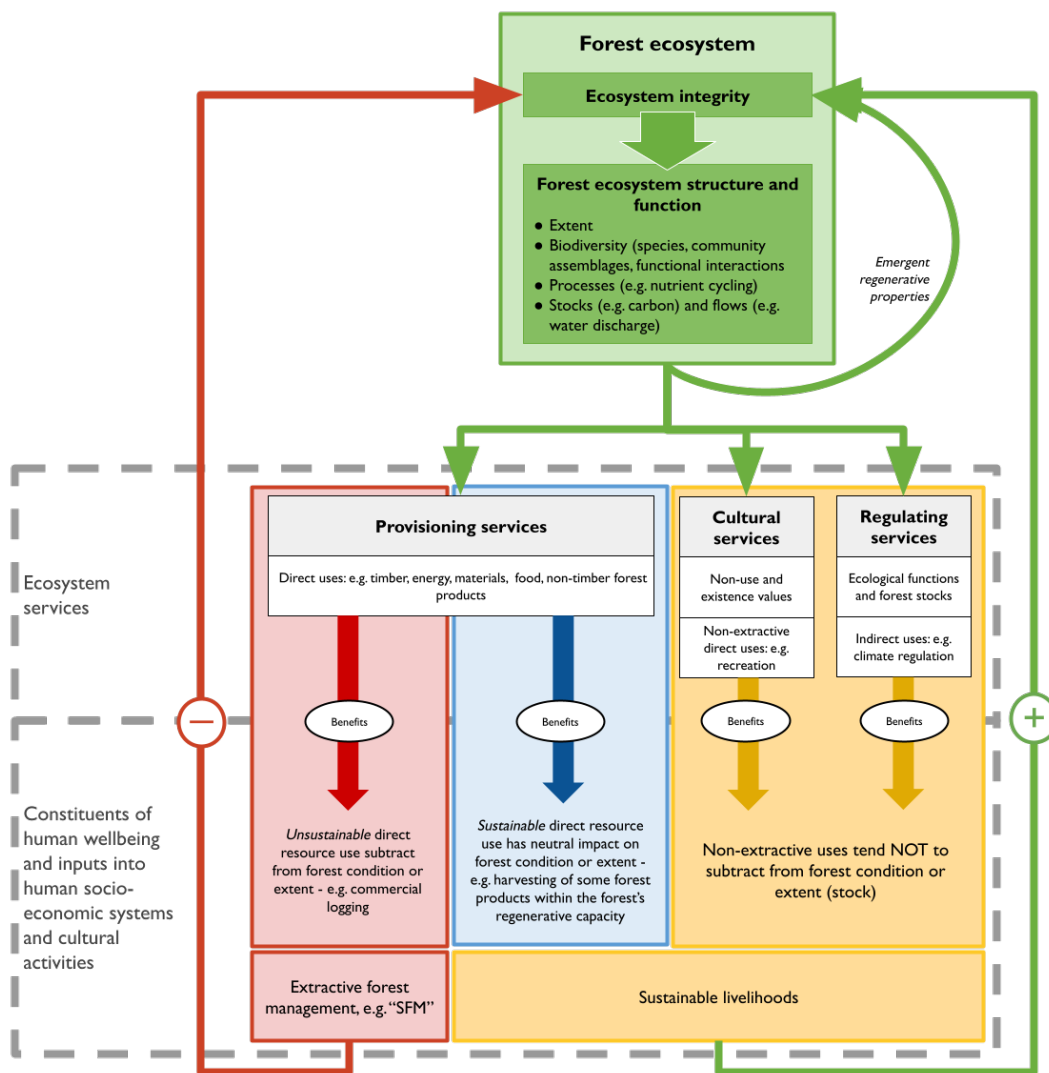
to also strengthen capacity. These top-down processes are rarely context-sensitive and often fail to take into account local and cultural norms. The consequences are disruptive and costly: traditional forest governance and management that is highly effective at protecting primary forests<sup>18,19</sup> has to be restructured to align with project requirements.

Further, these schemes tend to operate on a set of assumptions about the role of markets and property rights embedded in neo-liberalism with a focus on trade and commodity development. As a result, communities are increasingly participating in national and global markets to fund development, where power mismatches mean they are open to exploitation, while claimed environmental benefits are uncertain.

**THE BASKET OF BENEFITS APPROACH**  
 The Basket of Benefits approach outlined in Morgan et al., 2021 – **Capturing multiple forest ecosystem services for just benefit sharing: The Basket of Benefits Approach** – provides guidance for a more comprehensive approach to primary forest management and sustainable

livelihoods. It uses holistic, bottom-up and participatory methods to empower the customary and local communities, and other stakeholders, to: (a) form a shared understanding of the forest ecosystem services and how the benefits are accounted for and valued; (b) identify trade-offs between competing uses; and (c) develop governance arrangements and opportunities to appropriately capture a more comprehensive range of benefits from ecosystem services.

The Basket of Benefits approach rests on an understanding of ecosystem integrity as the basis for the multiple benefits of forests,<sup>20,21</sup> combined with a total economic valuation (TEV) of ecosystem services<sup>14,17,22</sup> to understand the relation between different activities and ecosystem integrity (see **Figure 1**). Activities that reduce ecosystem integrity – mainly extractive direct uses that harness provisioning ecosystem services of forests, are considered negative and avoided. Sustainable direct use of provisioning services and non-extractive direct and indirect uses of the forest, which tend to harness cultural and regulating services do not negatively ecosystem integrity.



**Figure 1** relationships between forest ecosystem integrity, ecosystem services and their contributions to livelihoods.

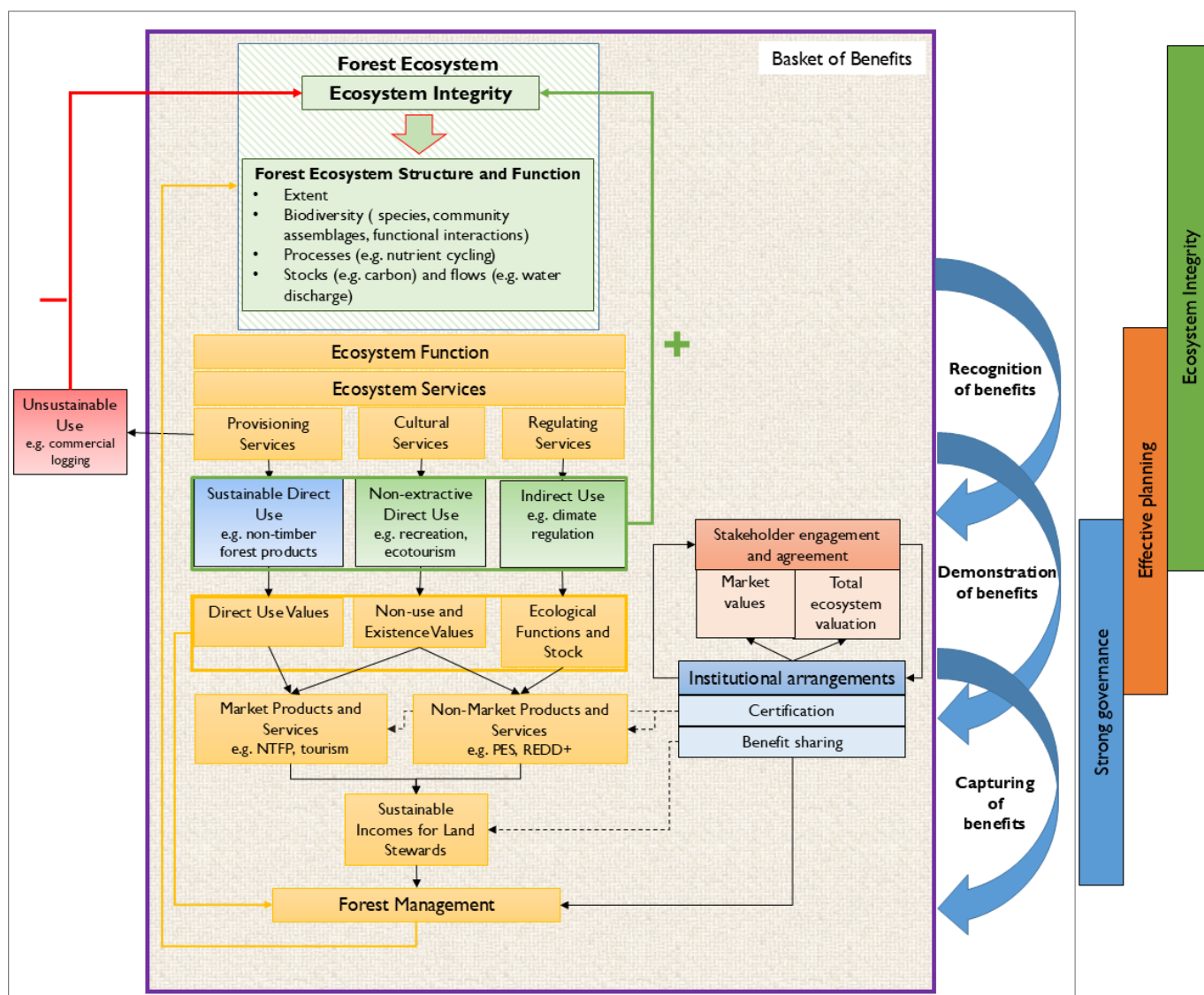
## IMPLEMENTING THE BASKET OF BENEFITS APPROACH

The Basket of Benefit approach is built on an integrity-based approach to forest management.<sup>23,24</sup> The approach rests on an understanding of ecosystem integrity as the basis for ecosystem services in forest landscapes. It combines scientific knowledge of ecosystems and their biodiversity, micro-economic methods of TEV of ecosystem services, along with traditional knowledge, within a planning process, to enable local communities and other stakeholders to better recognise and demonstrate the value of the full range of ecosystem service benefits provided by primary forests (Figure 2). The planning process identifies ways to capture ecosystem service benefits, whether through market mechanisms (e.g., non-timber forest products, carbon markets, ecotourism) or non-market PES schemes (at local, national or international scales).<sup>25</sup>

Collaborative development of strong governance standards allow stakeholders to create rigorous

and context-specific institutions that provide the basis for certification of ecosystem services and related products (Figure 2), and related benefit sharing mechanisms. A bottom up governance approach applies a consistent framework for developing community governance standards that will allow each forest-specific community standard to be certified as part of a global standard. This certification helps generate confidence that income-generating activities support primary forest protection and good social outcomes for the communities.

The combination of ecosystem integrity, full valuation of ecosystem services and high integrity planning and governance ensures that ecosystem services are fully recognised, demonstrated and captured (see Box 1 for a hypothetical case study). As a result, benefits and costs can be shared more fairly, while ecosystems are protected.



**Figure 2** Schematic of the Basket of Benefits Approach and its components, highlighting its links to ecosystem integrity, effective planning and strong governance, and the sustainable use of multiple ecosystem services.

## BOX 1

### THE BASKET OF BENEFITS – A RIDGE-TO-REEF HYPOTHETICAL CASE STUDY

A community live around and have customary ownership of a large area of forest at the top of a catchment above a valuable and unique coral reef system that is also a popular tourist attraction. The communities have long-standing cultural norms and rules around use of the forest that results in strong protection and minimal impacts on the forest, but some areas have previously been logged by outside groups.

The community has begun harvesting and selling nuts from the forest, as well as growing cocoa and coffee within previously logged forest areas that are being regenerated. They also have some tourism based on the unique birdlife in the forest. The communities agree that profits from these local enterprises should go mainly to those running them, but that a small portion should be used to fund a 'ranger and protection' programme for the forest.

An evaluation demonstrates very high ecosystem integrity of the current forest and its management. The customary and informal governance arrangements are evaluated and demonstrated to be both highly participatory and effective in decision-making. The benefit sharing agreements are made transparent. The communities come together and design

their long-term plan for the landscape, based on their current management of the forest. The ranger programme is given support to lead evaluations of ecosystem integrity, governance and planning every 3-5 years.

The communities take the evaluations to a highly profitable reef tourism companies at the bottom of the catchment. They agree that the protection and of the forest is vital for protecting the reef and agree to a payment to the communities, partly in the form of employment opportunities, increasing local opportunities for youth.

The communities approach an organic certification scheme and present the evaluations. The scheme agrees to certify their produce as organic. Similarly, another company certifies the ecotourism venture. They are able to charge higher prices for these products, improving incomes.

Finally, the communities secure some NGO funding to perform a carbon assessment. Based on this and the evaluations, the government agrees to include the forest within their regulatory carbon credit scheme and the communities receive an additional income stream.

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