

International biodiversity finance: reframing payments for ecosystem services within a co-investment for sustainable development approach

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Financing nature-positive development pathways in Southern countries is a central issue in the implementation of the Global Biodiversity Framework adopted in Montreal at COP15, and links to two streams: the need expressed by Southern countries to receive support for biodiversity protection through public finance from Northern countries; and the issue of aligning all financial flows with biodiversity objectives.

Both issues emphasize "innovative finance mechanisms", and in particular framing some of these flows, public or private, as "*payments for ecosystem services*". This *Issue Brief* repositions "*payments for environmental services*" schemes within a broader approach of co-investment for sustainable development. After examining the gap in investments for development in low income and lower middle-income countries, and the role and place of biodiversity in their development pathways, the paper discusses the nature of services provided by biodiversity and how they can be linked to payments, before looking at other financial sources that could contribute to a co-investment approach.

KEY MESSAGES

Investment needs are massive in least developed and lower middle-income countries, with a particularly acute investment gap for sustainable development in rural areas and in the land sector. Addressing this gap is essential to capture value added in the food and biomass sector, as well as to protect biodiversity as a production factor and a life support system. The National Biodiversity Finance Plans developed in the CBD framework are relevant tools to present these needs as an investment plan.

Maintaining natural capital intact in these countries is often presented as a case for payments for ecosystem services, although it would be more relevant to present it as justification for co-investment for sustainable development with these countries. Except for carbon capture, which is a global issue, ecosystem services are mostly local or national, often concerning water quantity or quality regulation. Their provision should not be the result of a "no-development" option that would need compensation, but the result of the investment in policies and measures that preserve biodiversity as an asset for the sustainable development pathway of the territories (productive investments as well as investment in institutions and rights for local communities and indigenous people).

National schemes for payment for environmental services (PES, *see distinction with ecosystem services below*) could play a role in attracting finance to invest in nature-positive and people-positive development pathways in these areas, but it is worth noting that they are intrinsically linked to national public policies and public investment flows, from international and national sources, hence the necessary co-investment framing.

A co-investment approach for sustainable development opens the way to other complementary sources, including national and international fiscal instruments, de-risking instruments, in addition to positive biodiversity impact or climate impact certificates (a more suitable formulation than "carbon" or "biodiversity credits"), that can be claimed by companies as a supplement (and not a substitute) to their efforts to reduce their own carbon or biodiversity footprint.

1. INVESTMENT NEEDS FOR SUSTAINABLE DEVELOPMENT PATHWAYS IN SOUTHERN COUNTRIES: THE CRITICAL ROLE OF BIODIVERSITY

The consequences of the cascading crises (pandemics, environmental disasters, socioeconomic consequences of the Ukraine war, etc.) have widened the divide between lower income and lower middle-income countries and the industrialized countries. For the latter, the capacity of governments to finance recovery and to invest in sustainable development has shrunk as a result of these crises and they are facing debt sustainability issues.

At the same time, lower-income countries, particularly in Africa, face a rapid increase in their population and workforce, which is leading to a rapid increase in the demand for decent jobs, hence the insistence on investments for industrialization. The development of industries linked to the food system and to biomass production could play a key role in these development pathways (Obura and Treyer, 2022), provided they are combined with local added value increase and jobs in the processing industry, rather than being oriented towards extractive raw material export. International demand for food (and biomass for energy) and growth in internal food demand (growing population and changing consumption patterns) is leading to increased pressure on land, biodiversity and forest ecosystems, which is jeopardizing the resilience and viability of this agri-food industrialization process.

Of course, investments will be needed to ensure that any industrialization process can occur in these countries. But policies to orient the development pathway towards a model that puts biodiversity as a critical production factor at the heart of economic development, particularly in rural areas (Obura and Treyer, 2022), will be critical. And this is not restricted to Africa, as Latin American countries also face the challenge of ensuring that the future development model shifts from an extractive and specialization-centred growth model, towards productive diversification pathways that can reduce inequalities and simultaneously ensure biodiversity protection (Cepal, 2022).

In their report calculating the needs for climate mitigation, resilience and natural capital protection in Southern countries apart from China, Nick Stern, Vera Songwe and Amar Bhat-tacharya propose an order of magnitude of 2 trillion dollars per year. Responding to these investment needs seems to be the most critical challenge, within which the necessary commitments to North-South financial flows for climate or biodiversity need to be organized. The 10-point plan for financing biodiversity, proposed by the UK government, takes such an approach in proposing a package deal that includes necessary official development assistance (ODA) commitments, innovative financing schemes, private sector alignment and increased intervention by international financial

institutions.¹ This represents a massive investment need in the least developed and lower-middle-income countries, particularly in rural areas and in the perspective of an industrialization pathway rooted in the processing of food and biomass: such land sector investments face the hardest struggle to attract investment flows, while they are critically dependent on biodiversity as a production factor and are also critical to protect biodiversity.

2. WHAT ROLE FOR PAYMENTS FOR ENVIRONMENTAL SERVICES?

Ensuring that natural capital is maintained rather than depleted, as in the case of tropical forests, is generally not presented as an investment problem, but as an issue of remunerating the ecosystems services that this natural capital provides. This framing is intended to bring more financial flows (public or private) to the countries that can protect this capital, or within these countries to the corresponding rural regions. We argue here that, on the contrary, it would be more sensible to make the case for investment in these areas, within which specific schemes of payment for environmental services can be organized.

Forests and other areas of importance for biodiversity can provide ecosystem services (carbon capture and storage, reservoirs of biological diversity, water cycle regulation, etc.). These areas and the resources they contain are endowed with sovereign rights of ownership, access or use by states, public or private actors (including communities). The ecosystems services they provide can be transboundary, while their maintenance depends on the way these resources are managed, under the sovereign responsibility of the states in which they are located.

The first beneficiaries of biodiversity are these states where such areas are situated. Biodiversity degradation, decline in pollination, soil pollution or degradation, disruption of rainfall patterns due to deforestation, disappearance of wetlands which has an impact on water quality: all endanger the productive base of these countries and can have a regional impact beyond national boundaries. While a reduction in seed varieties can threaten the resilience of the food system along with food and nutritional security.

In economic theory, payments for environmental services were initially proposed as a contract between two private actors, but in practice, public subsidies are often channelled to a community for the preservation of its natural capital, on the basis that it provides ecosystem services. Water cycle regulation or water quality preservation are the most common examples of payments for environmental services, both with private and public sources of funding.

¹ <https://www.gov.uk/government/publications/political-vision-the-10-point-plan-for-financing-biodiversity/the-10-point-plan-for-financing-biodiversity>

BOX. ECOSYSTEM SERVICES VERSUS ENVIRONMENTAL SERVICES

It is important to distinguish between **ecosystem services** (*"Ecosystem services are the benefits people obtain from ecosystems"* (MEA, 2005), *Ecosystem service: a function of an ecosystem whose use provides a benefit (for the farmer, or more generally for society (EFESE – French assessment of ecosystems and ecosystems services))*), i.e. services rendered by nature to people, and **environmental services** (*"action or management method of an actor (e.g. a farmer) that improves the state of the environment by enabling an ecosystem service to be increased, EFESE*), i.e. services rendered by people to other people (including future generations). Payments for environmental services are generally about "proxies": contracts are related to land-use practices and/or zoning assumed to be favourable to a regulation (or a cultural) ecosystem service (e.g. forest maintenance and water quality), even if the service is poorly defined (bundled services).

The history of payments for environmental services, framed as REDD+ in international relations (sometimes referred to as "international PES"), is linked to the preservation of forests, and is often centred on compensating for "opportunity costs" or the shortfall in income for not developing a specific territory. The conservation of biodiversity in these territories is presented as a "no development" option, and is opposed to a counterfactual scenario of extractive development pathways through agriculture or the mining industry. The REDD+ (Reduction of emissions linked to deforestation and forest degradation) mechanism has been established in such a general perspective; however, despite the orientation on payments for results, it does not entail payments for ecosystem services, but payments for the efforts made by countries through policies and measures that have these intended results (in general, the reduction of the rate of deforestation).

For such a payment scheme to function, the actual result (for instance, the non-degradation of natural capital, or a lower degree of biodiversity degradation) is not enough to justify the payment: there needs to be a causal relationship between the result and the policies implemented to obtain this result. For instance, if the reduction in deforestation rate is linked to the decrease of the international price of palm oil, would it justify any type of payment?

Since it is necessary to account for the degree to which policies and measures are responsible for the results (biodiversity protection, carbon storage), there is a great need for massive investment in the countries developing these policies in order to tackle the direct and indirect drivers of biodiversity degradation.

Furthermore, it would be counterproductive to present biodiversity protection in these areas as a "no development" option, as in many cases indigenous peoples and local communities who have the stewardship of these resources may be looking for the necessary investments for their own sustainable development,

rather than seeking compensation for a no-development option. This can entail investment in building, strengthening or sometimes rebuilding the socio-environmental institutions (such as the National Indian Foundation, FUNAI, in Brazil) that are critical to preserve the balance between economic activities and biodiversity protection in their territories, as well as to ensure their rights and access to these resources, and to prevent the intrusion of illegal activities.

A programme of co-investment in nature-positive and people-positive development pathways, including national PES schemes: with which content and funding sources? Given the magnitude of the investment gap in rural areas and in the land sector in least developed and lower-middle-income countries, it seems more relevant to make the case for an investment in nature-positive and people-positive development pathways than to organize schemes paying opportunity costs for no-development scenarios. This is also the only way to ensure that agricultural policies do not contradict with the environmental objectives of biodiversity policies. The type of investments needed can be for nature-positive agricultural models like agroforestry and agroecology, but also for the clarification and protection of tenure rights, which is critical to protect communities against land grabs but also to provide the long-term stability that is necessary to enable communities to invest in ecosystem restoration. Other examples of productive investments are also particularly crucial, such as investing in renewables to improve access to energy for households and small and medium companies as well as to avoid the harvesting of wood for cooking. Customary practices and local knowledge will have a key role in promoting nature-positive agricultural models. Whether it is for the management of combinations of plant species that develop in forest fallows or in the land management of forest plots (agroforestry fallows), several traditional practices have proven to be relevant and effective. Thus, an innovative system of financing biodiversity conservation through co-investment must take into account local expertise and relevant practices to increase its chances of success.

National programmes of payments for environmental services can be effective at protecting biodiversity if they do not only centre on compensating for opportunity costs, but if they provide a genuine incentive to change practices that degrade biodiversity. The distinction between Investment and Restrictive PES schemes is well established. A combination of the two in national programmes could prove to be very effective. Finance could be derived from private funds, but public investment finance would necessarily play a key role in such programmes. While international public financial flows seem extremely important given the magnitude of the needs, domestic public finance will also be key, hence the notion of co-investment for sustainable development.

Fiscal policies are also an important part of such national programmes: domestic fiscal instruments could be mobilized for such investment programmes in biodiversity-centred development pathways for rural areas (for instance with a low tax rate but a large tax base on the rest of the economy). Public policies play a key role in this regard, as the levying of a new tax would

not make sense if it was to coexist with subsidies that are harmful to biodiversity. Coherence in public policies is thus extremely central. But beyond the national scale, international fiscal instruments also need to be explored, along with tax schemes in global value chains or international taxation schemes.

Finally, public finance is very important for de-risking investments that are generally considered to be too risky by private finance, in particular in remote rural areas, in fragile ecosystems, and when the large number of small economic actors seem to aggravate the transaction costs or the risk of failure.

The risk of the "assetization" of biodiversity and nature-

Critical literature on economic approaches to nature have revealed the importance of looking not only at commodification processes but also at "assetization" processes, and in particular how the qualification of ecosystems or natural resources as financial assets in which to invest can also lead to negative impacts, especially when the prospective valuation of a future investment return is uncertain, which could lead to the investor being deceived or to the overexploitation of the resources, rather than their protection.

In the co-investment approach presented above, the leverage effect of public investments and sovereign guarantees (with the specific example of conservation trust funds, for instance) enables private investment to be attracted without assetization. Private investments in biodiversity-positive business models would be de-risked if the sustainable products were given advantages in international trade, for instance through facilitated due diligence for zero deforestation certified products, lower domestic taxes for sustainable products, or more favorable border tariffs.

Conversely, environmentally-targeted fiscal efforts in lower income countries can attract large international investments (from public sources but also philanthropic or private financial flows), as they indicate a national commitment and ownership of an environmental issue like biodiversity.

National Biodiversity Finance Plans as central tools for the co-investment approach

The framing of co-investment in nature-positive and people-positive development pathways links very directly to the National Biodiversity Finance Plans, to be developed in the framework of the UN CDB processes. Rather than compensating for a "no development" option, this approach enables to combine a diversity of positive investment-oriented financial flows, from public or private origin. They could for instance attract funding from companies interested in demonstrating their positive contribution to climate or biodiversity protection, in the form of "carbon positive impact certificates" or "biodiversity positive impact certificates": rather than naming them carbon credits or biodiversity credits, which would seem to allude to the fact that they could compensate for the negative carbon or biodiversity impact of the purchasing company, the formulation "positive impact certificate" reflects the co-investment nature of the funding, and is coherent with the principles set by international institutions (like the report from the United Nations' high-level expert group on the net-zero emissions commitments of non-state actors²). Beyond these impact-oriented funding sources, the exploration of fiscal instruments and de-risking instruments, as mentioned above, are extremely critical.

2 https://www.un.org/sites/un2.un.org/files/high-level_expert_group_n7b.pdf

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