

Background note

Refinancing debt for conservation and climate: the example of TNC's Nature Bonds program and its applicability to freshwater

10th meeting of the Roundtable on Financing Water (22-23 November, Abidjan)

This paper will inform discussions at the tenth meeting of the Roundtable on Financing Water (Abidjan, 22-23 November 2023) and particularly Session 3 on “Leveraging private finance for water”.

It builds on existing literature and experience accumulated by The Nature Conservancy (TNC), a global environmental organization working on addressing the twin challenges of climate and biodiversity. It may not reflect the opinion of the OECD, its Member Countries and the African Development Bank.

Introduction: what is TNC Nature Bond program?

The TNC Nature Bonds program combines debt refinancing, science, policy and robust conservation planning to help countries deliver on their conservation and climate goals, close the nature finance gap and support local communities. Debt-for-nature swaps first originated on the back of the Tropical Forest Conservation Act (TFCA) of 1998 (subsequently retitled in 2019 to include coral reef conservation). This Act enabled government-to-government debt swaps, with eligible developing countries being able to reduce certain official debt they owed to the U.S. Government and generate funds in local currency to support tropical forest conservation activities. This prompted about 20 transactions between sovereign governments (with lenders not limited to the United States).

In the Seychelles in 2016, TNC carried out a different type of debt-for-nature conversion, in which new debt was issued at better terms to replace previous official debt and generate savings reinvested in support of large-scale marine outcomes. Since 2016, TNC has deployed this approach in multiple countries to help governments refinance their debt and unlock funding and technical assistance to achieve nature protection, through the use of robust conservation plans that are implemented over 15 to 20 years.

Building on the experience accumulated with such projects for marine conservation, referred to as “Blue Bonds for Ocean Conservation” projects in Belize, Barbados and Gabon, TNC is now developing Nature Bonds projects for terrestrial and freshwater conservation as well as for climate adaptation and mitigation. As Nature Bonds projects are relatively complex to establish, TNC is in the process of developing guidelines, building and reflecting on its accumulated experience, to ensure that Nature Bonds projects are deployed in a manner that is robust and transparent and can guarantee real and measurable benefits for nature and people.

What was the impetus for the Nature Bonds program?

Ecosystems and natural resources around the world are under threat, due to a series of factors including over-exploitation of natural resources, pollution, intensive agriculture, infrastructure development and climate change. The climate crisis and other pressures are accelerating biodiversity loss, worsening food and water insecurity, and leading to loss of lives and livelihoods.

Between 1970 and 2022, according to WWF’s Living Planet index, biodiversity has declined by an estimated 69%. The speed of decline shows sharp differences across ecosystems, whereas marine and terrestrial biodiversity have declined by an estimated 36% and 38% respectively over the period, freshwater biodiversity fell by a staggering 83%. [1]

The Kunming-Montreal Global Biodiversity Framework, agreed in December 2022, has defined clear targets for both protecting and restoring biodiversity by 2030. These targets cover both nature protection and restoration: Target 2 calls for signatory countries to “ensure that by 2030 at least 30 per cent of areas of degraded terrestrial, inland water, and coastal and marine ecosystems are under effective restoration” and Target 3 calls to “ensure and enable that by 2030 at least 30 per cent of terrestrial, inland water, and of coastal and marine areas... are effectively conserved and managed through ecologically representative, well-connected and equitably governed systems of protected areas and other effective area-based conservation measures.”[2]

The funding gap to address the loss of biodiversity has been estimated at US\$ 700 billion [3]. Countries signatory to the Kunming-Montreal Global Biodiversity Framework have committed to increase financial resources “for biodiversity to US\$ 200 billion per year, including US\$ 30 billion through international finance” (Target 19). Substantial investments in protecting and restoring nature will also be needed to mitigate and adapt to climate change.

Even as the world made ambitious commitments at COP27 and COP15 to tackle the twin crises of climate change and biodiversity loss, developing countries are caught in a challenging debt cycle. They face high levels of indebtedness that have been compounded by the pandemic, the war in Ukraine, increasing expenditures to address climate-induced disasters, food security and other major global challenges. These same countries lack access to capital markets, undermining their ability to invest in climate smart futures for their citizens and economies and to achieve their global environmental commitments.

Nature Bonds projects can help governments reduce their sovereign debt burden and unlock funds to meet their ambitious national and global climate and biodiversity commitments while also supporting the well-being of their people and economies.

What do Nature Bonds projects consist of?

Nature Bonds projects are built upon three main elements:

- **A clear definition of conservation goals.** Governments should identify and commit to time-bound and measurable conservation and climate outcomes in support of the Global Biodiversity Framework conservation targets and nationally determined contributions to the Paris Agreement on climate. To date, Nature Bonds projects have been focused on marine conservation, with goals defined based on science and conservation planning expertise as well as stakeholder engagement and consultation. A typical commitment has consisted of protecting approximately 30% of a country's marine area, with half of that going into high protection status. Conservation plans are then translated into conservation implementation milestones that span 15 to 20 years. Conservation commitments have associated milestones built into the financial transaction. Failure to meet those obligations is associated with significant financial penalties, which means that government agencies have a strong incentive to meet their commitments.
- **Debt conversion.** Funding for conservation is generated through a financial transaction where a country's external debt obligations are refinanced at more favorable terms, freeing up resources for conservation in support of conservation and climate commitments. The debt refinancing is enabled by a credit enhancement, provided by an International Financial Institution such as a multilateral development bank in the form of political risk insurance or credit guarantees, so that the new debt can benefit from an investment grade rating. This would typically lead to lower interest rates, longer repayment periods and may lead to a reduction in overall debt. This generates savings for the country that can be deployed for conservation.
- **Establishment of a Conservation Trust Fund.** A Conservation Trust Fund is typically established in each Nature Bond project to receive and deploy funding generated through the debt conversion, either through government programs or approved grantees. This Conservation Trust Fund is independent and is usually a registered non-profit entity, with clear governance arrangements, and its own staff.

Where have they been applied?

TNC has helped deliver four transactions as part of Blue Bonds projects to date, all focused on generating savings for marine conservation. These four transactions have helped refinance more than US\$1.2 billion of debt and are expected to generate over US\$400 million of new funding for conservation in support of national commitments to protect and improve management of more than 176 million hectares (or 1.8 million square kms) of ocean, an area larger than the Gulf of Mexico.

These transactions, part of larger Blue Bonds projects, took place in the following geographies:

- **Seychelles:** in 2016, TNC and the Seychelles government entered a partnership to protect 30% of the country’s ocean, supported by the world’s first ocean debt conversion and an inclusive marine spatial planning process.
- **Belize:** In 2021, TNC and the Government of Belize announced an innovative US\$364 million Blue Bonds for Ocean Conservation project that reduced Belize’s debt burden, helped the country protect up to 30% of its ocean and provided a significant and long-term injection of finance for marine and coastal conservation.
- **Barbados:** In 2022, TNC and the Government of Barbados announced a Blue Bonds for Ocean Conservation project that will provides US\$50M of funding for marine conservation in Barbados over the next 15 years. As part of the debt conversion, Barbados committed to protect and effectively manage up to 30% of the nation’s oceans.
- **Gabon:** in 2023, TNC and the Government of Gabon announced the refinancing of US\$500 million of Gabon’s sovereign debt which will generate an expected US\$163 million in new funding for ocean conservation in support of commitment to protect 30% and management 100% of the country’s ocean. This project was the first debt conversion transaction in mainland Africa.

Overall, these four projects are expected to generate funding and associated benefits as shown on the table below.

| | Oceans – new protection (ha) | Oceans – improved management (ha) | Funds unlocked for conservation (US\$) |
|-------------------|------------------------------|-----------------------------------|--|
| Seychelles | 43,221,700 | 135,000,000 | 12.2 mn over 20 years |
| Belize | 630,900 | 3,535,100 | 180 mn over 20 years |
| Barbados | 5,582,400 | 18,689,800 | 50 mn over 15 years |
| Gabon | 816,100 | 19,329,200 | 163 mn over 15 years |
| Total | 50,251,100 | 176,554,100 | 405 mn |

Other similar projects have taken place where TNC was not involved, such as the debt conversion for the Galapagos islands in Ecuador, carried out with support from the Inter-American Development Bank (IDB) and the U.S. Development Finance Corporation (DFC). This operation is estimated to generate savings to finance conservation activities with a value of US\$323 million. These resources will be used to create the Galápagos Life Fund, which will finance conservation activities over the next 18.5 years in Galápagos Marine Reserves.

How does debt conversion work in practice?

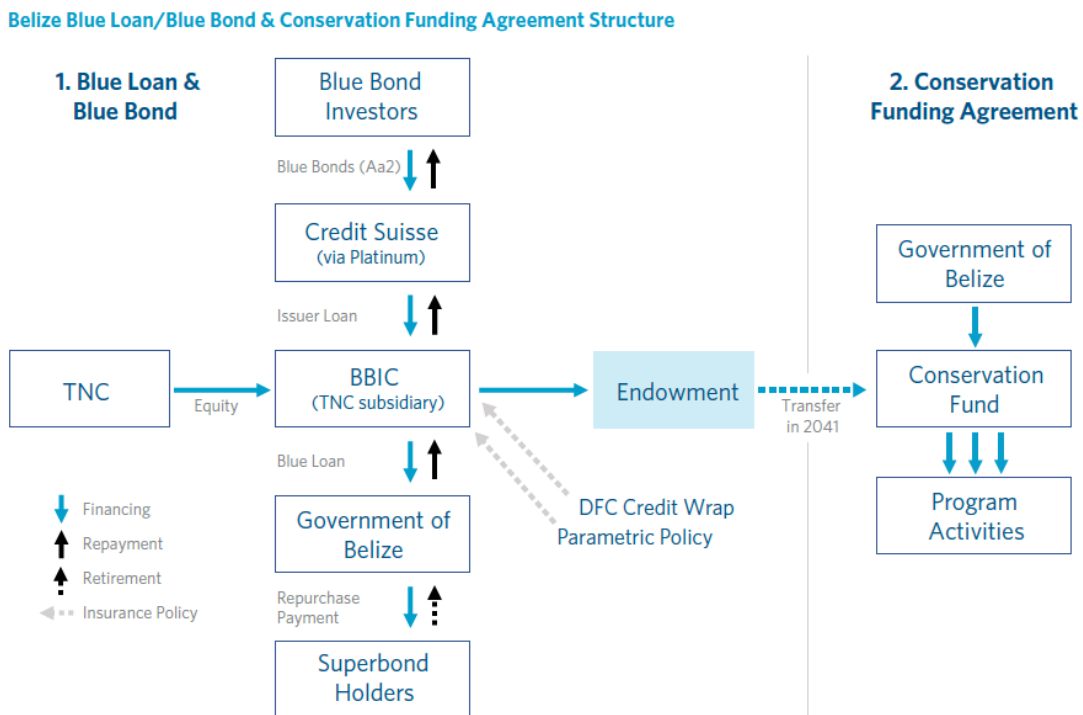
Traditional debt-for-nature swaps (such as the ones developed by the United States under the Tropical Forest and Coral Reef Conservation Act) worked on refinancing bilateral debt (where one country lends to another). More recent transactions, such as the ones in Belize, Barbados, Gabon and Ecuador, have managed to refinance commercial debt held by international bondholders. This presents much greater potential for replication and scalability. These four transactions have generated more savings for conservation in two years than the 20 or so debt-for-nature swaps of the first generation had generated over 25 years. This is evidence that these transactions are rapidly scaling up. In addition, there is a significant pipeline of transactions likely to be delivered in the coming months, several of which are in Sub-Saharan Africa.

The Belize transaction [4], for example, focused on buying back debt that was trading in the market at a deep discount. Prior to the transaction, Belize had a single Eurobond known as the “Superbond” with US\$ 553 million face value, which represented all of Belize’s external commercial debt and a quarter of its total debt. This bond was trading at a 45% discount against its face value.

At Belize’s request, TNC established the Belize Blue Investment Company (BBIC), which was able to issue a Blue Loan to the Government of Belize thereby enabling the country to repurchase the Superbond at a discount. To

finance this transaction, BBIC raised funding from Credit Suisse via the issuance of highly rated blue bonds sold to private investors on the market. Credit enhancement was provided by the United States Development Finance Corporation (DFC), combined with an equity contribution from TNC to further de-risk the transaction and demonstrate feasibility. It was specifically for the provision of financial reserves that could be mobilized in the event of a default and prior to receiving an arbitration award. Going forward and in subsequent transactions, such a financial contribution would not necessarily be needed.

This refinancing created both immediate and longer-term fiscal savings for Belize. In parallel, the government of Belize signed a Conservation Funding Agreement with BBIC committing to finance marine conservation efforts over 20 years. Payments from the Government are transferred to an independent Conservation Fund in Belize and part is paid in Belizean dollars. Savings from the transaction were also used to capitalize an endowment fund, which will be transferred to the Conservation Fund in 2041. The overall financial structure for the transaction is presented in the figure below.



As part of the transaction in the project, Belize committed to placing 30% of its ocean, including parts of the Mesoamerican Reef, under protection by 2026, using a transparent, participatory Marine Spatial Planning process, and establishing an independent Conservation Fund to allocate the conservation funding to in-country partners.

Important characteristics from these transactions are as follows:

- Funding generated by the debt conversion comes as two separate income streams: (1) annual fund flows of typically US\$ 5 million a year are generated; and (2) an endowment is established (and grown during the initial period) which can then generate long-term and predictable funding when annual payments end after 15 or 20 years.
- The costs of funding TNC staff time to develop and execute the transactions in Nature Bonds projects have been funded through philanthropy. In transactions to date, TNC has typically deployed approximately US\$ 2 million in philanthropic funding per project up-front, which have then generated from \$50-180 million in funding for conservation via the debt conversion.

In summary, TNC's main roles in those projects consist of the following:

- Work with countries to identify conservation priorities and develop a timebound plan to meet conservation targets.
- Bring together investors, public funders, and international development institutions to help nations refinance a portion of their debt with more favorable conditions.
- Provide technical assistance to support the design and establishment of an independent conservation trust fund to manage and disburse the conservation funding unlocked by the transaction to local conservation practitioners and government agencies.
- Provide technical assistance to facilitate the government's conservation planning, which includes working with stakeholders in a transparent, participatory process to create new protections and management plans that meet the needs of people and nature.

Nature Bonds in Sub-Saharan Africa: a focus on Gabon

Gabon was one of the first nations in the world to pledge to protect 30 percent of its ocean and land by 2030, and the only country to add a further commitment also to protect 30 percent of its freshwater. The Blue Bonds for Ocean Conservation debt conversion transaction announced in August 2023 has allowed refinancing US\$ 500 million of Gabon's national debt and generated US\$ 163 million in new funding for ocean conservation. Associated conservation commitments include protecting 30% and improving management over 100% of Gabon's ocean through Marine Spatial Planning. The debt refinancing is expected to unlock \$5 million each year over the next 15 years for conservation action and create an endowment expected to grow to approximately \$88 million by 2038 to fund conservation in Gabon in the future. As with Belize, DFC supported the transaction by providing political risk insurance, thereby improving access to capital markets for the bond being issued on the market. The political risk insurance facilitated the Moody's Aa2 rating for the transaction, compared to Gabon's sovereign rating of Caa1 at the time.

This transaction will enable the country to make annual contributions to an independent Conservation Fund and to an endowment that will continue to fund conservation after the annual payments stop. An independent non-profit trust fund has been established with TNC's assistance: *Le Fonds de Préservation de la Biodiversité au Gabon (FPBG)*. The FPBG will oversee an average of \$5 M annually in conservation funding from the debt conversion over a 15-year span and will then receive funds from the endowment account. At least 40% of the funds will be allocated to the Government to support conservation activities with funding earmarked for the Marine Spatial Planning process, and to strengthen and enforce regulation in Gabon's fishing industry, as an estimated US\$610 million is lost every year to illegal, unreported, and unregulated fishing. The remainder will fund marine-centric activities led by local parties such as NGOs, private sector, academics. The Conservation Trust fund will seek to attract additional funding from other parties including philanthropy, bilateral, and multilateral sources and will be able to support follow-on activities associated with the [Project Finance for Permanence initiative](#).

How replicable are debt conversion transactions?

These debt conversion transactions are highly scalable and replicable. The potential for replication is driven by three main factors:

- **Conservation outcomes:** Countries need to be committed to achieving conservation and/or climate outcomes and to have clearly identified what such outcomes need to be and how they can be generated. As almost all countries have committed to restoring and protecting biodiversity through the Global Biodiversity Framework and to nationally determined contributions to the Paris Agreement but many lack funding to

achieve such goals, this condition is likely to be met in numerous countries and particularly in Sub-Saharan Africa, which is significantly endowed with globally relevant biodiversity in need of protection.

- **Availability of debt to refinance:** debt conversions work well for countries that have sovereign debt trading at a deep discount in the capital markets, as it is the case for many African countries. Refinancing can help generate lower coupons and longer tenors to create significant funding for conservation. Many countries also have commercial bank loans (or other liabilities) that, while not often traded in the market, have high interest rates and/or short tenors that may be candidates for refinancing into a lower interest rate and/or longer tenor loans.
- **Availability and affordability of credit enhancement:** a key success factor for such transactions is the availability of credit enhancement and political risk insurance, so that the new debt can be issued with a significantly improved investment grade. DFC has been a critical partner in many of the transactions undertaken to date. Other bilateral and multilateral development finance institutions are considering providing similar risk mitigation products, so as to increase the potential to do more similar deals in more markets, although not all such institutions are able to deploy such instruments at this stage.

Replicability is also dependent on the existence of institutions, such as TNC or other large conservation NGOs that can act as sponsors for the transaction. This requires skills in multiple areas (such as finance, conservation, stakeholder management, institutional design, etc.) that are not always combined in single institutions, thereby increasing the complexity of putting together such transactions.

Potential applicability to other conservation priorities, including freshwater

TNC's Nature Bond projects have so far focused on marine conservation as this is how the program first emerged. However, the mechanism could be applied to other conservation or climate objectives, including freshwater ecosystems and TNC is currently exploring its applicability to these goals.

Freshwater ecosystems, referred to as "inland waters" in the Kunming-Montreal Global Biodiversity Framework adopted in Montreal in December 2022, are rich but are highly threatened, with almost one in three freshwater fish species threatened by extinction. Yet, freshwater habitats, including lakes, rivers and streams, marshes, and peatlands, provide irreplaceable ecosystem services including drinking and irrigation water, food security, flood- and drought risk reduction, pollution control, and carbon sequestration and storage. One third of our global food production relies on rivers and forty per cent of the global fish protein consumed by humans comes from inland water fish species [5].

Investment in protecting and restoring inland waters ecosystems has been lagging behind and needs to be accelerated. Although precise figures are lacking, we know that investments to restore freshwater ecosystems are small, especially by comparison to what is invested every year in grey water infrastructure (around US\$ 770 Bn of annual traditional water 'grey infrastructure investment' [6] vs. US\$ 0.7 Bn of 'green infrastructure' investment [7]).

An essential part of deploying Nature Bonds projects for freshwater would consist of defining clear conservation outcomes that can be generated over time. This could include protecting rivers and other water bodies (such as wetlands, lakes or aquifers) that are at risk associated with human intervention and climate change. TNC and others have defined approaches to Durable Freshwater Protection [8] that have been deployed in Southeast Europe or Ecuador and could be replicated in other countries. Investments are needed to make such inland water protection and associated restoration sustained and effective, such as investments in maintaining free-flowing rivers and natural flow regimes, and upstream watershed protection and management. Such investments can contribute to bending the curve of freshwater biodiversity loss while generating important water security co-benefits, such as reliability of clean water or flood risk reduction.

TNC has begun assessing the applicability of Nature Bonds projects to freshwater conservation. We will be looking to identify countries that meet the three criteria for replicability set out above, including countries where there are clear needs for freshwater conservation that could be met through the deployment of long-term protection plans. We would ideally want to engage with international organizations and multilaterals in order to identify such potential projects.

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