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Abstract

This policy brief analyses the possibility of applying debt-for-nature swap in the case of Pakistan. Debt-for-Nature Swap is a financial mechanism that allows heavily indebted countries like Pakistan to undertake environmental conservation measures in exchange for their foreign debt to be forgiven. By explaining the concept, discussing the successful and unsuccessful cases, as well as analysing the applicability of debt-for-nature swap in the case of Pakistan, this policy brief discusses possible options and challenges that Pakistan can face under the debt-for-nature agreements. Moreover, this brief explores policy actions that would benefit Pakistan in terms of climate swaps and debt restructuring.

Key Words: Debt-for-nature swaps; Environmental Conservation, Pakistan

Understanding Debt-for-Nature Swaps

The debt-for-nature swap concept was first coined by Thomas Lovejoy of the World Wildlife Fund (WWF) in 1987 as a solution for financial and debt restructuring of developing nations and to consequently mitigate the deleterious effect on the environment. Through a series of negotiations, between the international creditors and the indebted country, debt is reduced or forgone in exchange of the debtor country to undertake environment conservation measures¹. For low-income countries debt swap is an alternative for them to raise capital who are at risk of financial crisis and climatic catastrophes. Debt swaps can provide a plausible solution for simultaneously resolving the financial and environment crises and support green growth.

Debt-climate swaps could prove to be superior to restrictive environment protection grants as climate and debt problems are closely linked². Many emerging economies with histories of debt vulnerabilities like Pakistan, are also vulnerable to climate change. Debt restructuring to mitigate financial and environment crises could prove to be a win-win situation and achieve debt sustainability. Furthermore, debt-for-nature swaps can prove to be impactful in order to develop fiscal space for climate investment when environment protections grants fall short on the table³. Thus, the scaling-up of debt swaps as a way to support developing nations especially in the post-COVID era, can assist in building climate resilience and promote sustainable futures⁴. Debt swaps can be seen benefiting long-term national/private collaboration programs by focusing on building climate resilience models, preservation, adaptation and biodiversity protection⁵. Debt-for-nature swaps can be used as an instrument that can assist countries to deal with both debt and climate crises simultaneously, in addition to making considerable headway in achieving UN SDGs and Paris Agreement Goals.

¹ Yue, M., & Nedopil Wang, C. (2021, February 1). Debt-For-Nature Swaps: A Triple-Win Solution for Debt Sustainability and Biodiversity Finance in the Belt and Road Initiative (BRI)? Green Finance & Development Center. Retrieved January 8, 2023, from https://greenfdc.org/debt-for-nature-swaps-in-the-belt-and-road-initiative-bri/?cookie-state-change=1672728906225

² Chamon, M. d., Klok, E., Thakoor, V. V., and Zettelmeyer, J. (2022). Debt-for-Climate Swaps: Analysis, Design, and Implementation. IMF Working Papers 2022, 162, A001, available from: https://doi.org/10.5089/9798400215872.001.A001

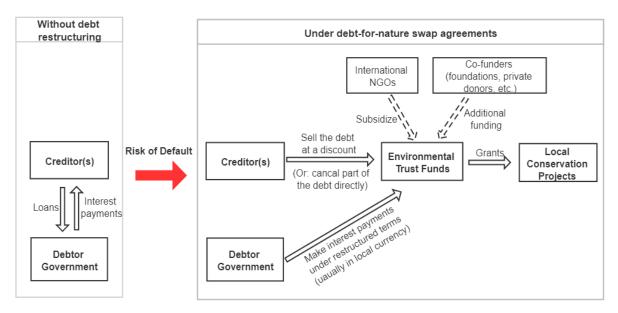
³ Chamon, M., Thakoor, V., Klok, E., & Zettelmeyer, J. (2022). Debt-for-climate swaps: Analysis, design, and implementation. IMF Working Papers, 2022(162), 1. https://doi.org/10.5089/9798400215872.001

⁴ Picolotti, R., D. Zaelke, K. Silvermann-Roati, K., and T. Ferris. 2020. "Debt-For-Climate Swaps." ISGD Background Note, Washington DC.

⁵ Steele, P., and S. Patel. 2020. "Tackling the Triple Crisis. Using Debt Swaps to Address, Debt, Climate, and Nature Loss Post-COVID-19." IIED Issue Paper, International Institute for Environment and Development, London.

Debt swaps are normally negotiated and financed under the framework of debt restructuring by global creditors such as the members of the Paris Club. To qualify for the debt-for-nature swap, the country needs to be heavily indebted (according to IMF standards). The national government of the indebted country needs to be able to convince its creditors and conservation agencies that they are capable of implementing and redirecting the debt repayment budget to finance environment conservation projects that will lead to environment conservation at the national, regional, or global level⁶.

As experience shows, debt-for-nature swap is not an easy task. Debt swap entails many stakeholders. Its players include not only a creditor and a debtor government, but also a number of other stakeholders such as donors, environmental agencies, and environmental NGOs⁷. The country seeking debt relief needs to convince creditors that the funds will be employed and utilized through a proper system. The payment to agencies is normally done through local currency. It requires the government to be committed to concerted efforts and comprehensive preparations. The process is shown in Figure 1.



[&]quot;An Illustration of Debt-for-nature Swaps". IIGF Green BRI Center (2021). www.green-bri.org

Figure 1: Illustration of Debt-for-nature Swaps

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⁶ OECD. (n.d.). Debt-for-environment swaps. OECD. Retrieved January 8, 2023, from https://www.oecd.org/env/outreach/debt-for-environmentswaps.html

⁷ https://www.econstor.eu/bitstream/10419/154927/1/NDL1998-069.pdf

Figure 1 shows the concept of a debt-for-nature swap. When there is a risk of default by the debtor country, negotiations between the creditor and debtor can result in debt-for nature swap. With this, environmental agencies, donors and NGOs come to play, and creditors can sell parts or the entire sum of their outstanding debt at a discount rate of 100% to them. With this revenue, the environment agencies preserve and maintain local conservation projects.

Progression and recent trends for Debt-for-Nature Swap

Debt-for-climate swaps allows nations to address climate issues and undertake strategic measures to protect the ecosystems, so they can progress towards green energy financing. OECD estimates that the biodiversity will decrease a further 10% by 2050. For the Global South who are still greatly dependent on agriculture and natural resource exploitation, climatic disasters have a serious impact on them.

Till this date, debt-for-nature swaps have been applied in over 30 countries worldwide. From 1987 to 2015, over US\$2.6 billion debt-for-nature swap agreements have been implemented worldwide, and approximately about US\$1.2 billion of transfers to conservation projects are made. Most of the debt-for-nature swap agreements especially during the 1990s were implemented in Latin America⁸.

The first ever debt-for-nature swap agreement took place with Bolivia in 1987 by forgiving a portion of Bolivia's foreign debt. The agreement allowed the Bolivian government to redirect their debt worth of USD\$650,000 towards conserving 3.7 million acres of land adjacent to the Amazon Basin. Till this date, the largest debt-for-nature swap agreement worth of US\$3 billion has taken place between the Paris Club and Poland in 1992 for environmental conservation⁹. In exchange, the donors agreed to transfer funds to 'Eco-Funds' (local financing facility) in national currency. Projects focusing on five key ecological protection areas such as air, water, climate protection, nature pollution, and waste management were implemented.

However, with the onset of 2000s, debt-for-nature swaps have declined as there has been a shift towards stronger world economy. With the exception of Seychelles, which implemented debt-

⁸ Yue, M., & Nedopil Wang, C. (2021, February 1). Debt-For-Nature Swaps: A Triple-Win Solution for Debt Sustainability and Biodiversity Finance in the Belt and Road Initiative (BRI)? Green Finance & Development Center. Retrieved January 8, 2023, from https://greenfdc.org/debt-for-nature-swaps-in-the-belt-and-road-initiative-bri/?cookie-state-change=1672728906225

⁹ Zylicz, T. (1998, January 1). Debt-for-environment swap as a game: The case of the polish EcoFund. EconStor. Retrieved January 8, 2023, from https://www.econstor.eu/handle/10419/154927

for-nature swap when it defaulted on its debt in 2008. Albeit Seychelles managed to secure the swap in 2008, but its economy was in a vulnerable position and the marine ecosystem was also deteriorating. In 2016, Seychelles secured a debt restructuring deal of US\$21.6 million with the Paris Club members (mainly UK, France, Italy, and Belgium). Seychelles initiated a "debt-for-nature swap" deal in exchange for its commitments to protecting the ocean. Seychelles has completed the conservation of 32% of its waters and has made every debt-related payment on time. Seychelles is an example of the successful completion of debt-for-nature swaps, a concept coined by Thomas Lovejoy in the 1980s.

Yet, over the past years, recent global events, the COVID19 Pandemic, and climate change have changed the situation drastically with climatic calamities hitting the emerging economies. The fast mounting debt situation which the emerging economies are facing, has given a renewed opportunity for debt-for-nature swaps, especially for countries who are vulnerable to climatic events and financial crisis. Currently, the global debt is standing at \$226 Trillion according to the IMF's Global Debt Database (GDD)¹⁰.

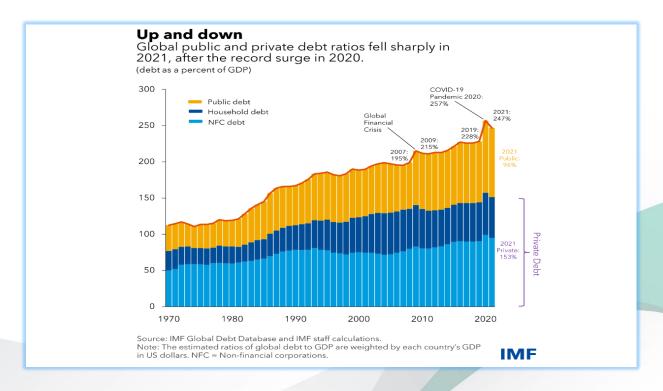


Figure 2: Global Public Private Debt Ratio

 $[\]frac{10}{https://www.weforum.org/agenda/2022/05/what-is-global-debt-why}{high/\#:\sim:text=In\%202021\%2C\%20global\%20debt\%20reached,in\%20its\%20Global\%20Debt\%20Database.}$

As Shown in the table 1 below countries with the most debt treated under debt-for-nature swaps.

Debtor Country	Debt US\$	Debtor Country Region
El Salvador	659.5	Latin America & Caribbean
Colombia	322.8	Latin America
Chile	186	Latin America
Bolivia	93.3	Latin America
Ecuador	66.0	Latin America & Caribbean
Bangladesh	8.50	South Asia
Egypt	29.60	Africa
Chile	186.0	Latin America
Dominican Republic	0.60	North America / Caribbean
Ghana	1.10	Africa
Guatemala	25.80	Central America
Guinea Bissau	0.40	Africa
Ionduras	68.0	Central America
ndonesia	30.0	Asia
amaica	405.40	Africa
ordan	45.50	Middle East
// Adagascar	45.80	Africa
Mexico	4.20	Latin America
Nicaragua	2.70	Central America
Nigeria	0.10	Africa
Panama	20.90	Central and South America
Paraguay	7.40	South America
Peru	123.30	South America
Philippines	59.30	Asia
Poland	141.10	Europe
Syria	15.90	Middle East
anzania	18.70	Africa
'unisia	1.60	Africa
Jruguay	7.00	South America
Vietnam	10.40	Asia
Zambia	2.50	Africa

¹² M. Guerin-McManaus, Ten Years of Debt for Nature Swaps 1987-1997 (Washington, DC: Conservation International, 2000).



¹¹ M. Moye, Commercial Debt-for-Nature Swaps: Summary Table (Washington, DC: World Wildlife Fund, 2003).

In 2020, at the annual IMF and World Bank fiscal summit, Kristalina Georgieva, managing director of the IMF, voiced her concerns regarding the developing countries who have "entered this crisis with already high debt levels, and this burden has only become heavier." Hence, debt-for-nature swaps in post COVID-19 era poses a plausible innovative financial mechanism for debt restructuring.

Pakistan Debt-for-Nature Swap Feasibility

Pakistan, the world's fifth most populous country, is grappling with one of the worst financial and climate-change crises. As of January 2023, the public Debt of Pakistan is around PKR 62.46 trillion (USD 274 billion) which is nearly 79 percent of gross domestic product (GDP) of Pakistan. The mounting debt on Pakistan's debt profile is not only adversely impacting the socioeconomic conditions but is also creating uncertainty for Foreign Direct Investment (FDI) in Pakistan.

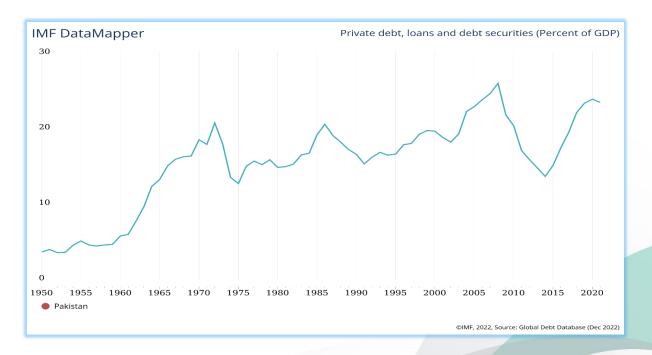


Figure 3: IMF Data Mapper

Source: https://www.imf.org/external/datamapper/PVD_LS@GDD/PAK?zoom=PAK&highlight=PAK

Before the COVID-19 pandemic, Pakistan through the IMF's Extended Fund Facility (EFF) programme, was on the roadmap to stabilize its economy and control the current account and fiscal deficit. However, post-pandemic Pakistan has faced great political uncertainty which has further made the economy vulnerable. Adding to this, the catastrophic monsoon floods have

caused an approximate 10% damage to Pakistan's GDP and US\$ 30 billion in terms of flood damage and economic losses¹³. For a country that is already in debt trap, this is quite a colossal damage¹⁴. The United Nations Secretary General, António Guterres, stated, "UN would strongly advocate for 'debt swaps' with the International Monetary Fund (IMF) and World Bank through which developing countries including Pakistan - instead of paying back loans to foreign creditors -- would be able to use that money to invest in climate resilience, investments in sustainable infrastructure, and green transition of their economies¹⁵." Pakistan emits less than one percent of global carbon emissions yet it is ranked in the top seven most vulnerable countries in terms of climatic disasters according to the Global Climate Risk Index 2021. The UN secretary general's call for debt-for-nature swap for Pakistan seems like a viable option, as the country is currently facing climate induced disasters coupled with financial difficulties.

Previously, on World Environment Day 2021 and COP27, Pakistan has made significant strides in its call for 'climate justice' with the establishment of Loss and Damage Finance Fund. On World Environment Day, Pakistan has signed new MoUs with Paris Club members for debtfor-nature swaps instead of paying back debt amounting to \$11.54 billion the UK, Germany, Italy and Canada¹⁶. The Pakistan's Prime Minster Mian Muhammad Shehbaz Sharif and the U.N. Secretary General António Guterres have called for debt restructuring and climate compensation for Pakistan at COP27¹⁷.

Although the Debt swap seems a viable option for debt-trapped Pakistan, but under what conditions, is important to understand. The debt-for-nature swap is a complex phenomenon and entails more than one stakeholder and a higher transaction cost. Government of Pakistan will require an extensive timeframe for designing and implementing as it is a lengthy process

¹³ Ministry of Planning, D. & S. I. 'P. block P.-S. (2022, October 28). Flood damages & economic losses are estimates over USD 30 billion and reconstruction needs over USD 16 billion. Ministry of Planning, Development & Special Initiatives. Retrieved November 13, 2022, from https://www.pc.gov.pk/web/press/get_press/837

¹⁴ Sabir, A. A. (2022, December 17). Swapping debt for nature: The express tribune. Express Tribune. Retrieved January 8, 2023, from https://tribune.com.pk/story/2391661/swapping-debt-for-nature

¹⁵ Guterres to take up 'debt swaps' with IMF, WB. The Express Tribune. (2022, September 10). Retrieved January 8, 2023, from https://tribune.com.pk/story/2375965/guterres-to-take-up-debt-swaps-with-imf-wb

¹⁶ Ahmed, K. (2021, June 1). Pakistan to ink debt-for-nature swap deals with UK, Canada, Germany, Italy . Arab News PK. Retrieved January 8, 2023, from https://www.arabnews.pk/node/1867931/pakistan

Siddiqui, J. (2022, November 14). Pakistan's roadmap for COP27: In search of a strategic vision. United States Institute of Peace. Retrieved January 8, 2023, from https://www.usip.org/publications/2022/11/pakistans-roadmap-cop27-search-strategic-vision

¹⁷ Siddiqui, J. (2022, November 14). Pakistan's roadmap for COP27: In search of a strategic vision. United States Institute of Peace. Retrieved January 8, 2023, from https://www.usip.org/publications/2022/11/pakistans-roadmap-cop27-search-strategic-vision

and time intensive taking up to 2 to 4 years¹⁸. Additionally, the government will also need to ensure the management and dissemination of funds to projects with accountability measures intact and to focus on technical assistance to build their system and capacity.

Furthermore, Pakistan will be required to prove its credibility to the international organisations, environment agencies and donors that it will be able to efficiently implement the debt-fornature swap agreements. For this, understanding and collaboration between public and private agencies is essential.

Debt-for-Nature Swaps normally triggers further inflation and currency depreciation. Pakistan is already facing double digit inflation (24.5%) and with currency already in a free-fall situation, debt-swap can further lower Pakistan's international credit rating. Moreover, there is also an impending fear that such swaps might lead to more international agencies meddling in their country's internal affairs and might be in conflict with the country's own agenda(s).

Policy Recommendations

- Government of Pakistan, at all levels, needs to focus on developing a long-term vision of strengthening its institutions and building their capacities to overcome their structural weaknesses. This entails putting accountability measures intact and building trust in publicprivate partnerships for debt-swap agreements to work.
- Debt-for-nature swap requires the country to be able to convince the international agencies that it is ready to commit to a long-term and a forward-thinking strategy. Although Pakistan has made great strides at COP27 and established itself as the leader of the developing world in the case of climate justice, but debt-swap is a complex phenomenon and will require an established commitment from the institution.
- To address its overarching climate change challenge, the Pakistan government needs to
 further empower the National Disaster Management Authority, the National Flood
 Response Coordination Center (NFRCC), along with their provincial counterparts. A multistakeholder approach needs to be implemented to institutionalise the process that will bring
 all players to the table.

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¹⁸ Yue, M., & Nedopil Wang, C. (2021, February 1). *Debt-For-Nature Swaps: A Triple-Win Solution for Debt Sustainability and Biodiversity Finance in the Belt and Road Initiative (BRI)?* Green Finance & Development Center. Retrieved January 8, 2023, from https://greenfdc.org/debt-for-nature-swaps-in-the-belt-and-road-initiative-bri/?cookie-state-change=1672728906225

• Pakistan must show a willingness to learn from other countries' successful debt-swap models, for example Seychelles, and strengthen public/private partnership at all levels.

Conclusion

Moving forward, climate finance always falls short in the real world. With ongoing climate and financial crises, debt-climate swaps are worth promoting as they can lead to expanding the capacity of debtors and creditor countries to focus on environment conservation. Thus, for countries like Pakistan who are both climatically and financially vulnerable, debt-swaps when planned competently and with equity in mind, can play an integral role in improving environmental conservation at global, regional and national level. However, for this, the government of Pakistan must display a long-standing commitment for implementing internal reforms and capacity-building of the institutions.