

#IKEMClimateFinanceWeek

# Debt-for-climate swaps

Developing countries

*Authors: Aleksandra Novikova (IKEM), Marina Olshanskaya (f. UNDP and f. AvantGarde Group), Janna Hoppe (ETH Zurich and f. AvantGarde Group), and Erik Grigoryan (Environment Group and f. Minister of Environment of the Republic of Armenia)*

*Climate finance plays a pivotal role in enabling developing countries to mitigate climate change and adapt to its impact. Thus far, the international community has failed to make progress towards the goal of mobilising an annual USD 100 billion for climate projects in the developing world by 2020. Meanwhile, substantial public debt and persistent fiscal deficits limit access to concessional and non-concessional climate finance in most of the developing world. Debt-for-climate swaps offer a solution to both challenges by providing debt relief while mobilising funds for climate protection. Based on past evidence, we assessed the applicability of the scheme to countries of the Caucasus and Central Asia. They can stand as a good example for the challenges and opportunities of debt-for-climate swaps for other developing countries. This brief summarises our recommendations for the design of a debt-for-climate swap to maximise financial value, achieve climate benefits in line with national goals and ensure effective and transparent governance and implementation.*<sup>1</sup>

## What is a debt-for-climate swap & why do we need it?

Developed countries have pledged to help finance climate actions in developing countries but have thus far fallen short on their commitments. On the one hand, many bi- and multilateral donors report challenges in disbursing their funds due to a failure to identify fundable projects, especially related to adaptation. On the other hand, many developing countries report difficulties in accessing available resources due to a lack of capacity and an inability to fulfil specific requirements established by donors or financing institutions.

High external debt burdens further hamper the efforts of many developing countries to access finances and set their economies on a low-emission and climate-resilient path. External debt owed to the private sector, bilaterally to countries or multilaterally to financing institutions, is particularly high in low- and middle-income countries and commonly surpasses the sustainability threshold of 18–22% of debt relative to GDP. This debt overhang is detrimental to economic growth and an obstacle to ambitious climate change mitigation measures.

A similar situation is apparent in the countries of Central Asia and the Caucasus, all of which report difficulties in accessing climate finance. On the one hand, the COVID-19 pandemic has worsened this situation: a high level of indebtedness affects creditworthiness and investor perceptions and makes it impossible to attract additional finance for climate resilience and a low-carbon transition. On the other hand, addressing these challenges could also bring new opportunities. Linking debt reliefs to climate actions is one of them and it must not be overlooked.

Debt-for-climate swaps provide debt relief while mobilising new finance for climate change mitigation and adaptation – a solution that can avert the climate crisis as well as the debt crisis. While specific designs vary, all debt swaps share the same underlying mechanism: the public debt of a developing country is cancelled in exchange for investments in climate-related projects within the debtor country and counts towards the creditor's climate finance

commitments. We see debt-for-climate swaps as an opportunity to enable the financing of climate actions in the countries of Caucasuses and Central Asia.

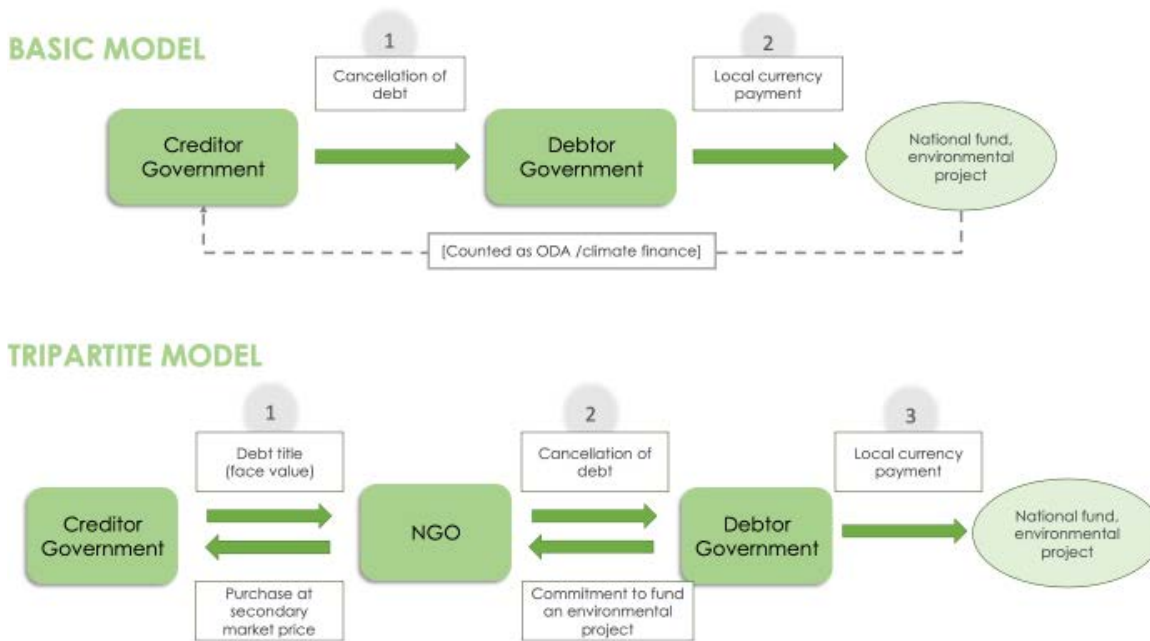
## What are the key features of debt-for-climate swaps?

### Debt relief in the past:

Debt relief linked to environmental goals or debt-for-nature swaps is not a new concept: after World War II, the Paris Club – comprised of major creditor countries – initiated large-scale debt relief programs in the form of debt-for-equity swaps. From 1991 onwards, the Paris Club creditors allowed debtors to convert their public debt into local payments for social or environmental projects. Since then, debt-for-nature swaps have raised hundreds of millions of dollars for the environment.

We identified five case studies of debt-for-nature swaps, which constitute examples of swap-funded investments in either mitigation or adaptation projects. A good example among these is a debt swap scheme implemented by the Seychelles and a club of public and private debtors. This scheme enables the country to cancel EUR 21.6 million in exchange for domestic investments in the protection of its unique marine ecosystem. The specific objective is to support the Seychelles in increasing the marine protected area from 1% to 30% of its territorial waters by 2020.

Another good example is a swap between Italy and the Philippines, which was contracted in 2012 and involved the cancellation of EUR 2.9 million in Philippine public debt in exchange for investments in environmental protection and poverty reduction. The projects in the areas of conservation, reforestation, agriculture and sustainable resource management placed a particular emphasis on the participation of local communities. By 2019, the programme was estimated to have 17,000 beneficiaries, including local farmers and fishers from predominantly poor districts.



*The architecture of debt-for-nature swap instruments*

**The architecture of debt swaps:**

Swaps are either arranged directly between one debtor and one or more creditor governments (basic model) or facilitated by a third party, often an NGO (tripartite model). In the latter case, the NGO purchases the debt of an indebted country at a secondary market price and redeems the debt title with the debtor country in exchange for conservation efforts. The secondary market price ultimately depends on the probability of full debt repayment and is thus higher if full repayment is expected. Additional factors in the determination include the extent to which the outstanding debt service payments are already written off by the creditor government, as well as the overall economic situation and growth projections of the debtor governments.

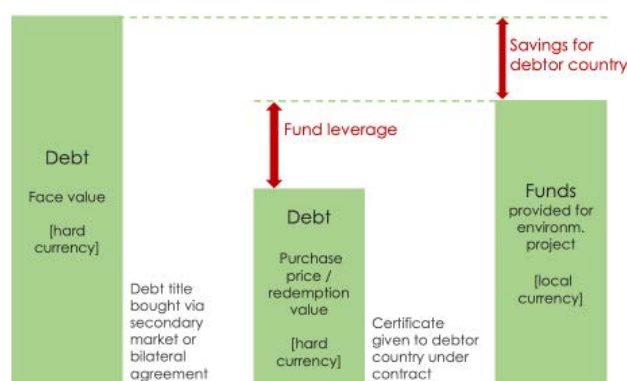
After a mutual agreement is reached, the debtor government usually makes expenditures gradually (often into a dedicated fund) in accordance with the original repayment schedule of the initial debt. These expenditures can be channelled directly towards environmental projects or placed in a national trust fund, in which case the interest earned on the deposited money can also be used to finance environmental projects (e.g. via grants to local NGOs). Such funds allow for earmarking and can increase accountability, because they are governed by a committee comprised of representatives of governments as well as independent observers, such as national or international NGOs.

If debt titles are bought on the secondary market, the price is determined by the credit rating, debt situation and overall economic performance of the indebted state. On the other hand, if debt titles are bought back via bilateral agreements, there are no rules or restrictions on the discount rate by which the initial debt is reduced. Discount rates are negotiated between the participating governments on a case-by-case basis; past rates have mainly ranged from 0–50%.

Overall, debt swaps are more feasible when creditor governments are willing to sell titles at a price that is lower than face value, because only then is fiscal space created for the debtor

government. However, as bilateral debt is pre-dominantly held in US dollars and investments in local environmental projects are generally made in the local currency, preferable conditions can arise even at a discount rate of zero if this option would allow scarce hard currency to be saved.

Most debt swaps have involved bilateral public debt, but debt swaps can also be conducted in the case of multilateral public or commercial debt. Commercial debt can be bought on the secondary market by a donor country as a form of ODA or climate finance. Multilateral creditors, such as the World Bank or the IMF, cannot provide debt relief per se because of their legal status, but donor countries can use their resources to pay off the debt held at such institutions.



*Leveraging funds for environmental protection: an overview of issued and redeemed debt titles in exchange for investments in environmental protection*

## Challenges

- If the discount rate is low or even zero, no extra budgetary room is provided, which leaves the overall macroeconomic situation unaffected.
- If the debt swap volume is small, the positive impact on the debtor's economic situation is negligible and may even be outweighed by the costs of negotiating a swap and setting up a trust fund.
- Debtor countries must have sufficient funding to deposit into trust funds, and there is a risk of inflation if debtor governments print money to pay the agreed amount in local currency.
- One danger associated with debt swaps is that these could crowd out other forms of finance that are potentially more effective. Debt swaps should be a measure to supplement the ODA, not a substitute for other channels that could provide new aid.
- Climate-relevant debt swaps must compete with other sectors (health, education, infrastructure) for a limited amount of eligible debt.

## Advantages

Debt-for-climate swaps are commonly referred to as 'win-win' agreements because they benefit both debtor and creditor countries. We identified the following opportunities and challenges for the involved parties:

### For the debtor country:

- Debt relief and conversion lowers the overall debt burden on the debtor country and reduces the strain on the national budget.
- Since counterpart payments for environmental projects are generally made in the local currency, debtor governments conserve scarce hard currency, which they can then use to establish foreign exchange reserves.
- Debt relief can strengthen economic stability, improve the credit rating of a debtor and attract new investments.
- Environmental projects benefit from freed finance that would otherwise have gone towards the creditor's budget; this often produces economic and social benefits at a local level.
- Grants to environmental projects or local NGOs are typically distributed via a trust fund that is set up according to original repayment schedules. This long-term regular financing facilitates funding and thus the debtor's absorption of climate finance.

### For the creditor country:

- From a financial perspective, the remaining debt claims of creditor countries increase in value through such swaps. Creditors can recover all or part of their debt and thus avoid the accumulation of arrears. Debt swaps are particularly beneficial if portions of the debt are already written off and full repayment is unlikely.
- Creditors must mobilise a lower amount of additional funding to meet their international climate commitments and can register the instrument as the provision of ODA at the same time. Since the nominal value of non-concessional

debt can be registered as ODA, many creditor countries have used this instrument to boost their ODA numbers. Furthermore, creditor countries can raise their environmental credentials by mobilising co-financing through international funding institutions. A debt swap that is carefully designed can guarantee an adequate use of funds and carries a greater responsibility than does a single donation.

## Why are debt-for-climate swaps an opportunity that the Caucasus & Central Asia cannot afford to miss?

### Access to climate finance:

The countries of Central Asia and the Caucasus have limited financial resources available to invest in nature and climate protection. Prior to 2020, the Kyrgyz Republic, Georgia, Uzbekistan and Armenia experienced solid and robust economic growth, a rise in exports and a stabilisation of macroeconomic conditions. Inflation was under control and private investments had increased. Still, the GDP per capita is only around USD 4,000 in the Caucasian countries, USD 1,200 in Kyrgyzstan and USD 1,500 in Uzbekistan. In Tajikistan, GDP per capita is only roughly USD 800, making it the only lower-income country of the list and one of the poorest countries in Asia with a high risk of debt distress.

As some of these countries reached the threshold for classification as upper middle-income (Armenia, Georgia, Kazakhstan, and Turkmenistan) and lower middle-income (Uzbekistan and Kyrgyz Republic), they cannot easily access international finance in the form of ODA. Additionally, all countries of Central Asia and the Caucasus are subject to lending restrictions imposed by the IMF and have committed to reducing their public debt burden in the medium term. Limited foreign direct investment (FDI) and poor credit ratings exacerbate the struggle to obtain financial resources. All of the selected countries have received a speculative grade rating from Moody's, which classifies the countries as 'volatile' and 'dependent on the current economic situation' (Ba and B).

### Potential for debt swaps:

Nearly all of these countries have a very high long-term public debt held in foreign currency, ranging from USD 3.6 billion in Tajikistan to USD 33.1 billion in Kazakhstan. Considering the respective size of the economies, public-debt-to-GDP ratios are particularly high in Armenia, Georgia, the Kyrgyz Republic and Tajikistan, at around 50%. In all countries except Turkmenistan, most public debt is denominated in foreign currency, which leaves these countries vulnerable to exchange rate depreciation. Nearly all public debt is medium and long term, with maturities of over 20 years.

For the majority of these countries, external debt represents a relatively high share of total public debt. In Armenia, Georgia, the Kyrgyz Republic, Tajikistan and Uzbekistan, external public debt accounts for roughly half of total external debt, while the share is much lower in Turkmenistan and Kazakhstan. Kazakhstan has the highest total external debt (USD 167 billion), of which USD 146 billion is from private-sector debt. Consid-

ering the size of the population and the economy, total external debt is high in all countries except Turkmenistan. Multilateral debt accounts for between 4% (Kazakhstan) and 31% (Armenia) of external debt. Concessional debt as a share of total external debt lies between 1% (Kazakhstan) and 47% (Kyrgyz Republic), which ultimately reflects the probability of full debt repayment as well as the overall economic situation.

Debt-for-climate swaps thus have considerable potential in the countries of the Caucasus and Central Asia. Public-debt-to-GDP ratios are above 45% in four of the seven countries, which greatly exceeds recommended thresholds. Altogether, externally owed public debt amounts to USD 48 billion; this could allow for large debt-swap volumes, making a significant contribution towards global climate finance.

### Feasibility of debt-for-climate swaps:

Therefore, debt-for-climate swaps offer a solution how to increase the financing of climate actions in Central Asia and the Caucasus because they provide debt relief that is conditional on domestic investment in climate actions. Since debt reduction is already an integral part of the economic agenda, debt swaps align with the overarching financial policies of Caucasian and Central Asian countries. While conventional instruments of debt reduction generally impose far-reaching austerity measures that impede investments in environmental projects, debt swaps can relieve countries of their debt burden while financing much-needed investments in infrastructure, climate adaptation and sustainable development. Many countries of the Caucasus and Central Asia have announced investment programmes that would increase public debt in the absence of debt relief. Furthermore, despite recent improvements, vulnerability to external shocks remains high and debt-to-GDP ratios are still above the sustainability threshold.

From the creditor's perspective, entering into swap deals with the countries of the Caucasus and Central Asia has the potential to increase the value of their debt titles, since the present value of debt titles is less than half of face value. This approach would also eliminate speculative debt and provide opportunities to re-invest freed resources.

Although there have been a few cases of debt swaps in the region, examples of debt-for-nature swaps are limited. Most swaps took the form of debt-for-equity swaps without a linkage to environmental protection and were conducted with Russia. In 2002, for example, Armenia's USD 100 million debt was cancelled, and in exchange, Russia obtained shares in five state-run energy enterprises. Tajikistan also performed USD 250 million debt-asset swaps with Russia, an amount representing more than 30% of total external debt at that time. Together with debt relief provided by Pakistan (USD 13 million), the public debt-to-GDP ratio decreased from 64% to 40% within one year. Now, this is a time to bring debt swaps in these regions to a new level, linking them to climate actions.

## How should debt swaps be designed for countries of the Caucasus and Central Asia?

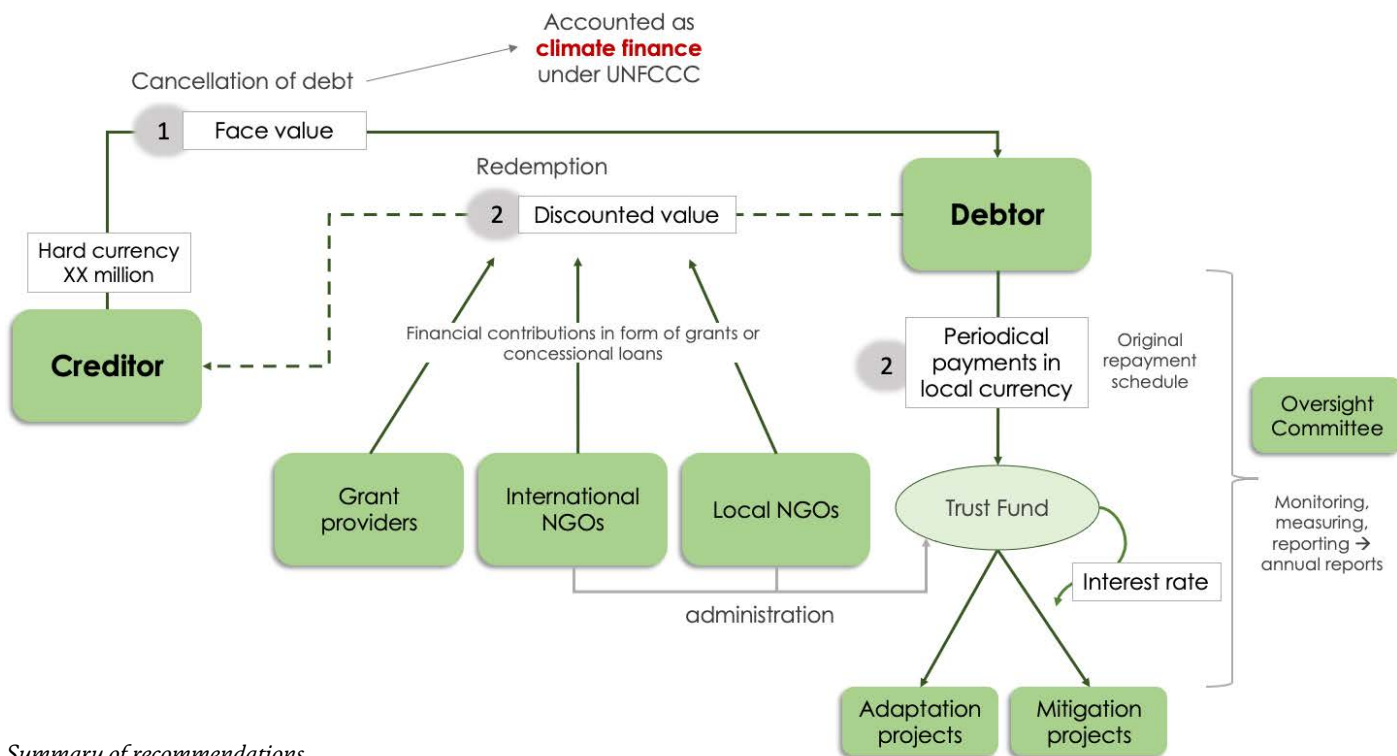
Environmental and fiscal improvements can only be realised when debt swaps are designed carefully, as indicated as indicated above. Keeping in mind the current institutional structures and experiences in the countries of the Caucasus and Central Asia, we formulated three success factors for them which ultimately determine the overall effectiveness of the scheme. First, the swap's financial value to the debtor country must be maximised in order to build strong political will and secure national buy-in. Second, the ambition of the scheme must be aligned with the national climate goals, and a robust monitoring and reporting framework must be in place to ensure that the climate impacts are duly monitored and communicated. Lastly, transparent governance arrangements and a well-capacitated operator of the scheme are indispensable for success.

### Recommendation 1: Financial structure of the debt-for-climate mechanism

The debtor country should take the following considerations into account when designing and negotiating the financial structure of a swap mechanism in order to maximise the financial values of such schemes:

- Seek to achieve a positive difference between the original face value of the debt and the redemption price to create fiscal space. This can be accomplished by either purchasing the debt title on the secondary market or bi-laterally agreeing to apply a discount rate greater than zero with the creditor.
- Negotiate the cancellation of the outstanding debt service payments before making counterpart payments in order to provide extra budgetary room.
- Convert the outstanding debt payments into local currency payments so that hard currency can be saved.
- Schedule payments according to the original repayment schedule to ensure a constant and predictable funding stream.
- Re-invest the interest rate earned by the funds to provide additional capital for the mechanism.
- Conduct debt swaps only if the debt volumes are large enough to justify the lengthy negotiation process and high transaction costs associated with deal structuring and implementation.

Furthermore, additionality can be ensured on three fronts. First, debt swaps and the corresponding debt relief should be additional to creditor's ODA and not crowd out other ongoing investments in climate mitigation and adaptation. Second, climate-related projects funded by debt swaps should be additional to those already funded in debtor countries. While it is beneficial to have an existing vision for concrete climate objectives and measures and infrastructure in place to deliver them, payments originating from swap deals should not be used to legitimise cutbacks in governmental spending in other areas. Finally, it is essential to ensure finance additionality for the debtor country through debt relief.



Summary of recommendations

**Recommendation 2: Ensuring climate and other environmental and social benefits**

The design of the climate swap mechanism should correspond to national climate commitments. In particular, they should be fully anchored in and aligned with national climate change priorities and the objectives as outlined in the National Determined Contributions (NDCs).

In order to ensure the achievement of climate and other environmental and social benefits of climate swap schemes, it is important to start by determining a baseline scenario that can serve as an indicator of progress and final outcomes. This requires the development of indicators and specific defining targets for various steps of the implementation phase. To increase transparency, monitoring plans and methodologies should also be developed to enable regular progress tracking, reporting and communication to all stakeholders and to the public at large.

The involvement of independent actors, such as NGOs, has cultivated trust between debtor and creditor government and plays an essential role in encouraging the participation of civil society. While some international NGOs have gained extensive experience in facilitating debt-for-nature swaps, the contribution of local or regional NGOs is also important to provide crucial insight into local conditions.

**Recommendation 3: Effective governance and implementation**

Effective implementation and governance structures are essential to the success of the swap mechanism. This calls for the establishment of a scheme operator or the selection of one from existing organisations. This should be a financial institution with solid expertise in fund management and technical capacities to implement climate projects. This combination of financial and climate expertise rarely exists in developing countries and often must be developed from scratch, with additional technical assistance provided by international organisations. In addition, to ensure oversight and provide strategic guidance, a good practice is to establish a supervisory committee comprised of representatives of both the debtor government and the creditors as well as international and national NGOs.

To ensure the national ownership and longevity of the programme, it is crucial for the debtor government to play a leading role and be closely involved in designing and implementing a swap deal. At the negotiation stage, political support for the climate swap proposal at the highest level has proved to be a particularly decisive factor in ensuring that the deal is successfully executed. Climate-related projects should be anchored in national climate policies, and debt swaps should be embedded in a broader strategy for debt reduction.

Countries that regularly participate in swaps can use their cumulative experience to improve their organisational capacity and enhance the skills of their personnel. In any case, single swap arrangements are stepping stones to future debt swaps.

<sup>1</sup> For more information and references, please see the background study: Marina Olshanskaya, Aleksandra Novikova, Janna Hoppe, Erik Grigoryan. 2020. Evaluating the fiscal and environmental efficacy of debt-for-climate swaps: Using global case studies to derive recommendations for countries of Central Asia and the Caucasus. Berlin: Institute for Climate Protection, Energy and Mobility (IKEM).

---

### Partners:



**AvantGarde**  
Group

**ENVIRONMENT**  
G R O U P

**IKEM**

### Contact:

**IKEM** – Institut für Klimaschutz,  
Energie und Mobilität e.V.  
Magazinstraße 15-16, 10179 Berlin  
[www.ikem.de](http://www.ikem.de)