ELABORATION OF POTENTIAL MODEL FOR "DEBT FOR NATURE SWAP"

Final report

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1. INTRODUCTION

Total public debt to GDP in Pakistan decreased to 83.5 percent in June 2021 from 87 per cent in June 2020, which represents 40 trillion Rupees, of which 34 per cent is external debt.[1] This is one of the highest debt ratios in South Asia.[2] The 13,6 trillion Rupees external public debt is derived from four key sources, with around 48 percent coming from multilateral loans, 30 per cent from bilateral loans, 13 per cent from commercial loans and 9 per cent from Eurobonds/Sukuk at end Jun 2021.[3]

Pakistan's largest outstanding bilateral debt is toward China, followed by Japan, the United Arab Emirates, France, and Germany, according to the International Monetary Fund.[4] Pakistan have called for country creditor to renegotiate its debt and for a temporary moratorium on suspension of debt service due to COVID-19 crisis.[5] When in June 2021, Pakistan was ready to sign agreements with Germany, Italy, Canada, and the United Kingdom of the **Paris Club**[6] for debt relief in exchange for investments in environmental conservation efforts across the country.

Pakistan has a long experience in debt swap. The Pakistan Italian Debt Swap Agreement (PIDSA) signed in 2006 under which Rs.8.27 billions of Pakistan's debts owed to Italy was to be swapped for expenditure on selected development and environment projects, which was extended until June 30, 2020. Other debt swap agreements were signed with Canada and Germany that cut down Pakistan's total overseas debt of $35.2 billion by $652 million. Debt relief and conversion lowers the overall debt burden on the debtor country and reduces the burden on the national budget, allowing investments.

While Nature Debt Swap has its specifics, it shares the same debt swap mechanism: the public debt of a developing country is cancelled in exchange for investments in local currency in environment or climate-related projects by the debtor country and counts towards the creditor's environments and climate finance commitments. The cancellation of external debt usually comes at a discount from the nominal value. Environmental or climate projects benefit from released finance that would otherwise have gone towards the country creditor's budget when it often produces economic and social benefits at a local level.

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.

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1 Public Debt Bulletin & Annual Debt Review (2020-21), Debt Policy Coordination office, Ministry of Finance

2 The World Bank's Debt Report 2021 Edition I

3 Ibid note 1.

4 IMF Country Report N°21/73, April 2021.

5 In October 2021, Pakistan with Germany and Japan agreed on a suspension of debt services under the G20 Debt Service Suspension Initiative (DSSI).

6 The Paris Club is an informal group of creditor governments from major industrialised countries (i.e., OECD, including also the Russian Federation) set up in 1956. The Chairman and the Secretariat are provided by the French Treasury. The participation of creditor countries is voluntary. The group meets on a monthly basis in Paris with debtor countries in order to agree on debt restructuring. Rescheduling is a means of providing a country with a debt relief through a postponement and, in the case of concessional rescheduling, a reduction in debt service obligations.

Though, multilateral creditors, such as the World Bank or the International Monetary Fund (IMF), cannot provide debt relief because of their legal status, both multilateral organisations are planning to launch a platform to advise poor countries on funding climate and conservation activities, and by acting as an intermediary to creditors (private banks and/or other countries) and advise a deal.[7]

When at COP26, in Glasgow, the Presidents of both Argentina and Bolivia called for a debt swap for climate action, pressing the IMF to allow the possibility of swap the debt of countries in crisis in exchange for financing environmental projects.[8] This renewed interest in debt swap for climate is to help closing the gap between current climate finance available for least developped countries and estimated financial needs for climate adaptation, not speaking of investment needed in clean energy, when at the same time poor countries' debt rose 12% to record USD 860 billion in 2020.[9]

This report aims at p**roposing a potential model for "Debt-for-Nature-Swap" with indicative strategy for its implementation** in consultation with Ministry of Climate Change (**MoCC**) and other relevant stakeholders.

2. METHODOLOGY

A large review on literature relative to Nature Debt swap and practices from principal donors countries was undertaken. Two consultations were conducted in Islamabad with the **AFD** (French Development Agency) and the **GIZ** (German Development Agency) that have experience in debt swap worldwide, with the view to understand whether they were engaged in specific debt-swap programs with Pakistan. If the AFD has a specific debt swap program – The Debt Reduction-Development Contract (C2D) – Pakistan is not eligible to that program yet. On its side, the **GIZ** is engaged in a Climate Adaptation and Climate Finance programs, to support Pakistan to build up climate resilience and for the country to access to climate finance through climate dedicated funds such as Green Climate Fund, and through finance instrument market such as green and ecosystems bonds. A late consultation with the MoCC in February 2022, indicates that the latter considers such instrument as a tool to be implemented at government level with potential eligible models that have biodiversity conservation objectives. When WWF Pakistan is not involved in implementing projects funded through debt-swap.

At the same time three meetings were hold with provincial forest departments of Sindh, Gilgit Baltistan, Khyber Pakhtunkhwa and Baluchistan to identify potential projects in relevant forest ecosystem with high emission reduction potentials. The purpose of this mission was to identify three (3) projects that could be developed in a public private partnership together with the different Provincial Forest Departments. When no private investment is to be found, these projects could serve as potential models to be financed through a Debt-for -Nature- Swap with the view to obtain emission reductions.

7 https://www.reuters.com/article/us-imf-world-bank-climate-change-debt-ex-idUSKBN2BU3FO

https://www.telesurenglish.net/news/Argentina-and-Bolivia-Propose-IMF-Debt-For-Climate-Swap-20211101-0009.html

8 See: https://www.telesurenglish.net/news/Argentina-and-Bolivia-Propose-IMF-Debt-For-Climate-Swap-20211101-0009.html

9 The UN estimates that the total cost of climate adaptation could reach $300 billion annually by 2030, see: https://gca.org/un-estimates-the-global-cost-of-climate-adaptation/

Therefore, this report will through a literature desk review of best practices, supported by specific cases as example, make some recommendations that could be used for Pakistan to establish a Debt-for -Nature- Swap approach that finances REDD+ projects nationally. When three selected models with high emission reduction potentials are referred in annex to this report that could be financed through Debt-for -Nature- Swap.

3. MODELS OF DEBT SWAP

3.1. Swap Transactions

Two main models of dept swaps, based on the number of negotiating parties involved in a transaction, have been used so far: (i) bilateral swap transaction or direct swap; and (ii) third-party - trilateral or multilateral swap transaction with the involvement of an intermediary.

Bilateral, direct swaps: in this case, the creditor government cancels debt owed by the debtor government in exchange for the debtor setting aside an agreed amount of counterpart funds in local currency for an agreed purpose. This model is used mostly in official (government to government) debt swaps for two types of transactions: debt buy-backs and debt forgiveness.[10]

Such transactions are usually only possible if a debt swap clause (i.e., a provision allowing for debt swaps) has been included in a Paris Club agreement – debt restructuring agreements between the debtor government and the donor governments that are members of the Paris Club.

The bilateral model has been used to convert Official Development Assistance (ODA) debt and publicly guaranteed export credits. When 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% to 50%.

Third-party swap: trilateral or multilateral swaps through an intermediary, the difference between the purchase price of debt and its redemption price in local currency is the gain from debt conversion, which can be invested in environmental projects.[11] An organisation (e.g. an NGO) solicits debt donations or purchases debt at a secondary market at a discount from face value from a creditor and negotiates separately with the debtor government the cancellation of the debt in exchange for project funding.

Such debt is either donated by the bank for tax advantages or sold on the secondary market at a discounted price, having been written off as unlikely to be repaid. The discount rate is related to the creditworthiness of the debtor government, at a high discount (e.g., 50% or more) reflects debt from a country that is very unlikely to repay.

3.2. Types of debt

Different types of debt can be transacted for nature debt swap:

10 OCDE 2007

11 ibid

Official Development Assistance (ODA) debt: loans, grants, technical assistance, and other forms of cooperation extended by developed governments to a developing country. Usually, as part of direct swap under bilateral agreements, there are no limits on the amount that can be converted for the Paris Club' creditors.

Commercial debt: debt owed by a government to a commercial bank or commercial supplier company. These debts can be bought on the secondary market by a donor country as a form of ODA or climate finance. Commercial debt swaps involve commercial bank debt being sold on secondary markets at discounted rates. These transactions involve a commercial company creditor and government debtor, and they are typically brokered by third-party. Officially guaranteed commercial debt conversion is limited to 20 percent of total country exposure or up to USD 20 to 40 million determined on a country-by-country basis under Club de Paris rules.

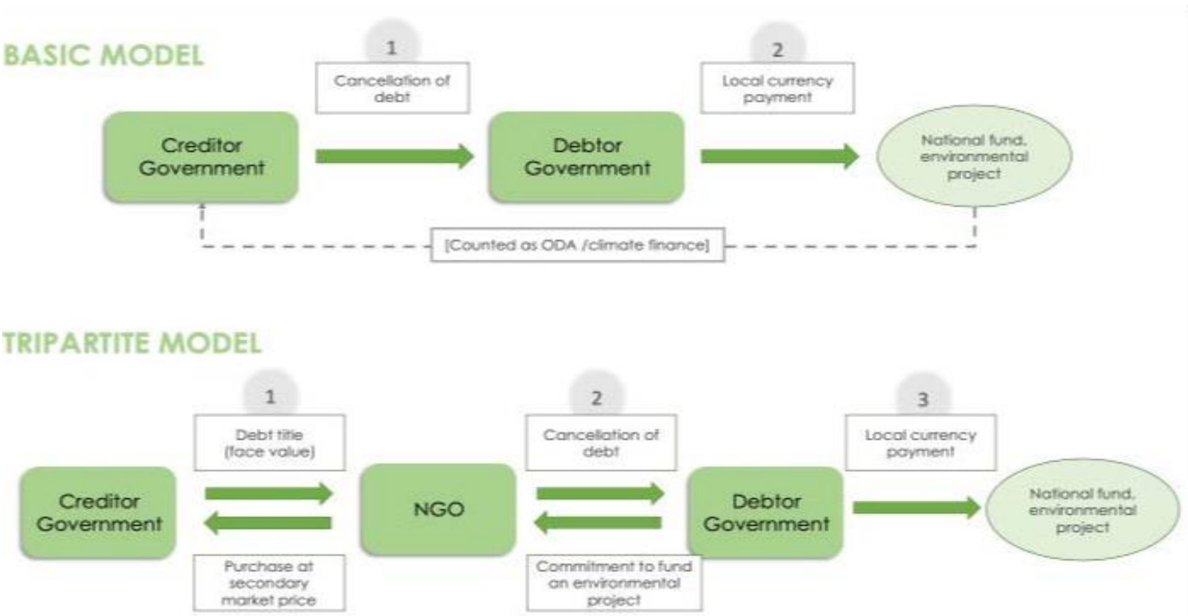


Figure 1 - models of debt for nature swaps (source: IKEM – Institut für Klimaschutz)

Both models are the object of a mutual agreement by which the debtor government usually makes expenditures gradually (often into a dedicated fund) in accordance with the original repayment schedule of the initial debt.

Dedicated Trust Fund: these expenditures can be either channelled directly towards environmental projects or placed in a national trust fund. In the latter, the converted debt is usually deposited in the form of local currency denominated government bonds in a conservation trust fund that disburses the funds (derived from interest and amortisation of the bonds) for conservation purposes. In both cases fund disbursements for projects are agreed upon criteria and guidelines negotiated in advance between the creditor and debtor.

When Pakistan is negotiating, **multilateral Debt-for-Nature Swap agreements** contemplating to set a dedicated national trust fund could be envisioned. The interest rate earned by the funds could be reinvested to provide additional capital for the mechanism. A cost-analysis and feasibility study of such institutional framework should be undertaken.

3.3. Pakistan Public Debt Structure

A thorough analysis of the Pakistan debt portfolio is needed to assess the amount of debt potentially eligible to be swapped and the possible revenues from the swap. A realistic assessment should consider that only official sovereign and sovereign guaranteed bilateral debt is eligible for debt swaps and some creditors may not be willing to embark on a Debt-for Nature Swap.[12]

Pakistan external debt was recorded at US$ 86.4 billion at end of June 2021. Pakistan's external debt is derived from four key sources, with around 48 percent coming from multilateral loans, 30 percent from bilateral loans, 13 percent from commercial loans and 9 percent from Eurobonds/Sukuk.

Although borrowing from commercial sources has relatively increased during the last few years, multilateral and bilateral sources still cumulatively constitute 78 percent of external public debt portfolio as of end Jun 2021. Pakistan can aim theoretically to swap 43% of its total external debt (30 percent from bilateral loans, 13 percent from commercial loans), when possible. Pakistan's largest outstanding bilateral debt is toward China, followed by Japan, the United Arab Emirates, France, and Germany.

China and United Arab Emirates are not members of the Club de Paris, and they do not do Nature-Debt-Swap so far. From then, an inventory of creditor country and of commercial loans that may engage in Nature-Debt-Swap is needed for determining options for debt swap. This review of Nature-Debt Swap option should be undertaken together with the MoCC and Ministry of Finance services.

Table 1: Composition of External Public Debt, June 2021 (Source: Ministry of Economic Affairs, State Bank of Pakistan & Debt Policy Coordination Office, Ministry of Finance)

	Jun-2019		**Jun-2020**		**Jun-2021**	
	PKR billion	**$ million**	**PKR billion**	**$ million**	**PKR billion**	**$ million**
External Public Debt	**11,976**	**73,449**	**13,116**	**77,994**	**13,594**	**86,415**
I Govt External debt (a + b)	**11,055**	**67,800**	**11,825**	**70,314**	**12,432**	**79,031**
a- Long term (1 > year)	**10,849**	**66,536**	**11,565**	**68,773**	**12,297**	**78,173**
- Paris Club	1,832	11,235	1,837	10,924	1,687	10,726
- Multilateral	4,531	27,788	5,196	30,898	5,323	33,836
- Other Bilateral	2,074	12,717	2,258	13,428	2,332	14,821
- Euro/Sukuk Bonds	1,027	6,300	891	5,300	1,227	7,800
- Commercial Loans	1,381	8,470	1,357	8,068	1,525	9,696
- Others	4	26	26	155	204	1,294
b- Short term (< 1 year)	**206**	**1,264**	**259**	**1,542**	**135**	**858**
- Multilateral	127	778	137	814	80	506
- Local Currency Securities (T-bills)	0	0	99	586	55	352
- Commercial Loans	79	486	24	141	-	-
II Debt from the IMF	**921**	**5,648**	**1,291**	**7,680**	**1,162**	**7,384**
- Federal Government	-	-	476	2,833	541	3,437
- Central Bank	921	5,648	815	4,847	621	3,947

Challenges for Debt-for-Nature Swaps are complex in their implementation due to several reasons:

12 OECD 2007

High transaction cost. As a Debt-for-Nature Swap involves transactions among several groups (e.g., debtor, creditors, donors, NGOs), its preparation, negotiation, and implementation make a complex and lengthy process, taking at least 2 to 4 years.

The administrative costs. The management the debt-for-nature-swap mechanism should be weighed against the potential annual flows. Experience shows that these administrative costs should not represent more than 5% of the annual revenue for the scheme to be economically viable. These costs should be considered before a decision to establish a dedicated institution (e.g., a fund) to manage and monitor the Debt-for-Nature Swap implementation.

Requirements for long-term financial commitments. The success of Debt-for-Nature Swaps depends heavily on whether debtor countries are fiscally capable of making stable and long-term commitments to the conservation programs. However, such commitments are hard to predict and can be easily undermined in case of a fiscal or liquidity crisis, as well governance issues such as mismanagement and corruption.

Possibility of inflation or local currency devaluation in the debtor country. As one common provision in Debt-for-Nature Swaps is the use of local currency to service the swap; local currency devaluation or inflation can reduce the real cash value of conservation commitments. The impact can also be reversal: the injection of large quantities of local currency might give rise to inflation in the debtor country.

Challenges in the design and implementation of conservation projects. As most Debt-for-Nature Swaps include designs for the conservation of local resources or biodiversity, they might conflict with already existing conservation programs.

Low fund impact. Debt-for-Nature Swaps have only resulted in relatively small amounts of debt relief, limiting their impact in reducing developing countries' debt burden.

3.4. Pakistan experience in Nature-Debt-Swap transactions

Since 2000 Pakistan has developed a long experience with Nature-Debt Swaps. In 2006, Pakistan signed a series of Nature-Debt Swap bilateral agreements with Canada, Italy and Germany that cut down Pakistan's total overseas debt of $35.2 billion by $652 million. Pakistan is currently negotiating another round of Nature-Debt-Swap agreements with Canada, Italy, Germany, Italy, and the U.K, yet to be finalized that would tie debt relief to the achievement of biodiversity goals.[13]

So far, Pakistan has favoured a bilateral and direct swap approach with creditors, on a project-by project basis approach. When considering institutional approach, a joint debtor and creditor ad-hoc governance bodies to administer and monitor these bilateral agreements, excluding special dedicated trust fund to manage released funds, has been used so far. This approach was used for the Pakistan Italian Debt Swap Agreement (PIDSA) funding the Central Karakorum National Park (CKNP) project.

Case study:

The **Pakistan Italian Debt Swap Agreement (PIDSA)** signed at Islamabad on November 4th, 2006, relates to the remaining part of Pakistan's concessional debt consolidated through a precedent

13 See: https://www.bloomberg.com/news/articles/2021-05-24/pakistan-nears-debt-for-nature-swap-agreement-with-creditors?sref=P6xXtEaF

bilateral agreement between the two countries that establishes procedures for the implementation of debt swap operations. On October 3, 2018, Pakistan and Italy agreed to further extend the timeline of the PIDSA till June 30, 2020.

Under the PIDSA the equivalent to Rs.8.27 billions of Pakistan's debts owed to Italy was to be swapped for expenditure on selected development projects. To date, a total of 35 projects have been completed, ten projects are ongoing, while four projects are still to be undertaken. Italy has cancelled debt over 78 percent of the Rs.6.41 billion of the total debt swap amounts of Rs. 8.27 billion.

The agreement set fields for the utilisation of the funds for buying goods and services to implement development projects in the areas of agriculture, health, education, environment, basic infrastructure, rural development, microcredit, and poverty alleviation.

The project institutional framework is the following:

The Management Committee of PIDSA is the highest decision-making forum for the implementation of PIDSA programme assisted by the Technical Support Unit (TSU). When projects are financed and implemented through Implementing Partners that include eligible UN agencies and governmental organizations, UNDP, NGOs and eligible civil society organizations. That governing model was adopted for financing the Central Karakorum National Park (CKNP) that is under the responsibility of the Gilgit-Baltistan Forest, Wildlife & Environment Department (GBFWE).

Central Karakorum National Park (CKNP) is to promote the governance of mountain ecosystems in northern Pakistan by improving ecological services, conserving nature, promoting the sustainable use of natural resources, and developing an effective response to climate change. Specifically, the project aims at consolidating CKNP's management system, and extending it to Deosai National Park by building a corridor that connects the two sites, when adding priority sites adjacent to Deosai National Park that are ecologically important but have so far been overlooked in terms of official recognition and management planning.

The UNDP as 'Implementing Partner' is responsible for the implementation of the project, including the monitoring and evaluation of project interventions, achieving project outputs, and for the effective use of resources. Other 'Responsible Parties' are directly accountable to the UNDP in accordance with the terms of their agreement or contract. UNDP uses Responsible Parties to benefit from their specialised skills, to mitigate risks, and alleviate administrative burden.

A 'Project Board' is established and responsible for making management decisions taken by consensus when guidance is required by the' Project Manager'. To ensure UNDP's ultimate accountability, Project Board decisions should be made in accordance UNDP standards that shall ensure best value to money, fairness, integrity transparency and effective international competition.

Bilateral agreement institutional framework should be designed to manage, monitor, and account for the implementation of the expenditure programme that should guarantee transparent rules of project selection, and accountable management of the revenue flows and expenditures, with the representation of both the creditor and representation from both representatives of the creditor and debtor countries, and third parties as observatory or/and that can provide technical skills and advice.

The goal is to keep management costs as minimum as much as possible, and having procedures that allow fast disbursement of funds. Based on precedent experience in project management benefiting funding from debt swap, Pakistan can adopt rules and procedures that balance efficiency and transparency management, when negotiating Debt-for Nature swap agreement.

4. DIFFERENT CREDITORS' MODELS OF FOR DEBT-FOR-NATURE SWAP

Most of the creditor countries have different debt swap approaches, criteria to select eligible countries and projects and debt swap programmes. Some models may include forest projects. Some major creditors' Debt-for-Nature Swap programs that are relevant to forestry and REDD+ are presented below. Pakistan should adapt its Debt-for-Nature Swap options strategy according to these different programs.

4.1. The Tropical Forest and Coral Reef Conservation Act

The United States of America (USA) Debt-for-Nature swap program was introduced by the Tropical Forest Conservation Act (TFCA) of 1998, which was retitled in 2019 by the Congress after being renewed, adding coral reefs protection to become the Tropical Forest Conservation and Coral Reef Act.

Acknowledging that tropical rainforests were valuable for preserving biodiversity, reducing atmospheric carbon dioxide, and regulating hydrological cycles, Congress decided to expend debt swap to countries throughout the world with tropical forests.

The result was the 1998 TFCA, which was established to generate funds to conserve tropical forests by reducing external debt in countries with tropical forests. The program also offers opportunities for public-private partnerships, and the majority of TFCCA agreements to date have included additional funds raised by USA based NGOs, taking a multilateral approach to Debt-for Nature-Swap.

The Nature Conservancy, Conservation International, the World Wildlife Fund, and one Indonesian foundation (KEHATI) have contributed an additional USD 22.5 million to debt swap agreements, enabling more debt to be treated and, in turn, generating more funds for conservation. The TFCA programs, arranged prior to 2019, has generated more than USD 339 million for grants and projects to help protect and sustainably manage tropical forests in beneficiary countries.

To be eligible for this program, a developing country must contain at least one tropical forest with unique biodiversity, or a tropical forest tract that is representative of a larger tropical forest on a global, continental, or regional scale. Other economic, political, and administrative criteria are set for eligibility by the relevant services. In order to be considered for TFCA, the government of the interested country needs to formally express interest to the US Department of the Treasury. Contact should be initiated by the government ministry responsible for debt renegotiation (e.g., Ministry of Finance).

Three debt conversion mechanisms are possible under TFCA:

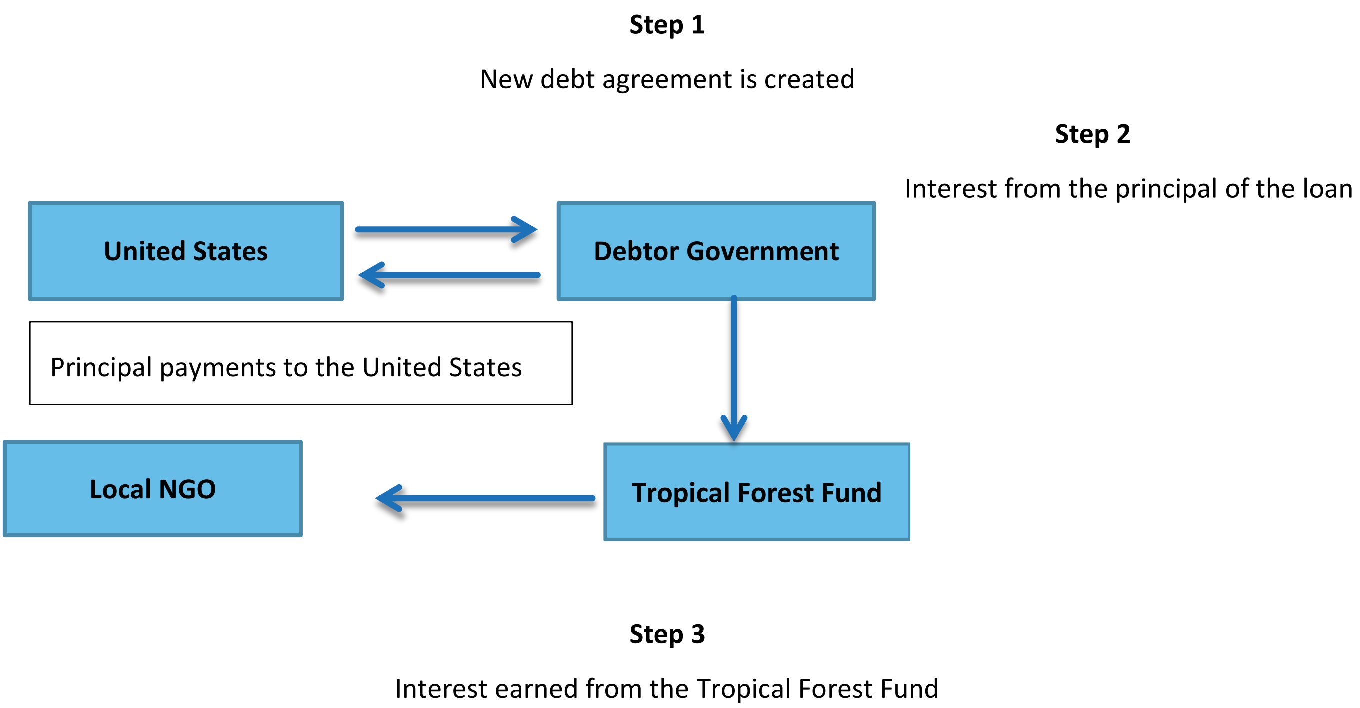
Debt reduction: Debt owed to the US is reduced by a given amount based on net present value (NPV) of the country's debt to the US budget (expressed in terms of X cents to the US dollar). The outstanding reduced debt stock is reissued as a new dollar debt payable in 10 to 20 years with a concessional 3 percent rate of interest. The interest stream is paid into a local currency trust fund. This mechanism requires appropriation of U.S. Government funds.

Debt buy-back: The debtor country pays the US Treasury a lump sum dollar payment equivalent to the NPV of part of their outstanding debt and makes a concurrent lump sum payment in local currency into a TFCA trust fund equal to at least 40% of the buy-back price of the debt. This mechanism does not require appropriation of U.S. Government funds.

Debt swap: A third party (e.g., conservation NGO) purchases part of the country's debt from the US Government, paying the NPV of the debt. The debt is then repaid in local currency at an amount agreed upon by the third party and debtor. This mechanism can involve, but does not require, appropriation of U.S. Government funds.

Trust Fund: Once a country has successfully negotiated a debt reduction agreement with the U.S., the country enters negotiations to create a TFCA Framework Agreement, including creation of a Trust Fund to receive interest or lump-sum payments. The fund is by administered by a local Board of Directors comprised of a majority of local private citizens plus at least one host government member and one US government member.

Eligible conservation projects include: *(i) the establishment, maintenance, and restoration of parks, protected reserves, and natural areas, and the plant and animal life within them; (ii) training programs to increase the capacity of personnel to manage parks; (iii) development and support for communities residing near or within tropical forests; (iv) development of sustainable ecosystem and land.*



- **Step 1:** the current debt agreement is cancelled, and a new agreement is negotiated.
- **Step 2:** a Tropical Forest Agreement is signed and interest payments for the principal of the loan are deposited in local currency equivalents into a Tropical Forest Fund
- **Step 3:** interest earned and the principal of the Tropical Forest Fund is generally given in the form of local currency as grants to local conservation NGOs.

4.2. German Financial Cooperation Debt-for-Nature Swap

In 1996, Germany signed a debt-for-nature agreement with the Philippines, in which it agreed to cancel Deutsch Mark 12.8 millions of bilateral debt in exchange for the Philippines investing 30% of the debt in local currency in a forest conservation program.[14] Sectors eligible for investment include environmental and resource protection, education, and general poverty reduction. This started the German Debt-for-Nature Swap programme.

The German Debt Swaps programme involves a substantial element of debt forgiveness, with typically only 20% to 50% of the debt cancelled being required to be invested in local currency in development projects.[15]

The German Debt Swap Programme has formalised practical steps:

Step1: Assessment of the debtor capacity: before entering into a Debt-for-Nature Swap parties have clarified the following issues: (i) capacity of the debtor to mobilise the required local funds, (ii) opportunity: is the administrative effort commensurate with the expected outcome; (iii) time efficiency and impact: will the debt relief be swift and significant; (iii) capacity: Is professional financial management ensured (investment risk, level of return etc.); and (iv) stability: how stable is the legal, institutional and sectoral framework.

Step 2: Based on step 1 assessment start the bilateral agreement negotiation, the Debt Conversion Agreement between the Government of the debtor country usually represented by the Ministry of Finance and KfW (German development Bank) is concluded: outstanding sovereign debt resulting out of German Financial Cooperation can be redeemed at 100 %, whereby, in return, the partner country provides a defined amount of counterpart funds in local currency for the designated purpose agreed in the debt Conversion Agreement.

Step 3: Within the designated sector, programmes or initiatives are selected, prepared, and appraised, generally as complement to ongoing German cooperation projects/ programmes funded through the KfW.

Step 4: Based on the selection process above, a "Separate Agreement" between Debtor Government and KfW is concluded, stipulating technicalities like implementation procedures for the selected projects.

Step 5: Debt relief and provision of local funds are affected as per agreement.

Step 6: Implementation of agreed projects and/or programmes' activities.

Trust Fund: Preferably a Conservation Funds (also known as "trust funds", will be set for the pledging with local currency funds, either sinking funds, whose quantity is to be exhausted over time, or endowment funds that use the interest generated only, keeping intact the starting capital. These Conservation Funds are comprised of government, mix private and public sectors representatives, NGOs to monitor funds implementation, disbursements, and funded projects' implementation.

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14 Ross P. Buckley: "Debt-for Development Exchanges: An Innovative Response to the Global Financial Crisis", (2009) 32 University of New South Wales Law Journal 620 -645.

15 Kathrin Berensmann: "Debt Swaps: An Appropriate Instrument for Development Policy? The example of German debt swaps." Discussion Paper 5/2007 German Development Institute (2007).

When discussing with the GIZ representative in charge of climate finance, he mentioned that the GIZ is engaged in a Climate Adaptation and Climate Finance programs, to support Pakistan to build up climate resilience and for the country to access to climate finance through climate dedicated funds such as Green Climate Fund, and through finance instrument market such as green and ecosystems bonds. However, Pakistan is currently negotiating a debt relief in exchange for investments in environmental conservation efforts across the country with Germany.

4.3. France Debt Cancellation and Development Contracts (C2Ds)

Under the France's Programme of Debt Cancellation and Development Contracts (C2Ds), the debtor country still repays the debt to France, but the money is then reinvested in the country through grants allocated to projects that have been agreed upon by both countries in sector such as: primary education and vocational training, health and the fight against major epidemics, the decentralisation of infrastructure and the management of natural resources. Contrary to the Debt Swap programmes presented above, the C2Ds offer no additional debt relief forgiveness for countries with unsustainable debt levels but redirect debt repayments into development projects only.

The C2D program relates to two types of Official Development Aids debts: (i) foreign loans and French Development Agency (AFD) debts obligation. The C2D process is comprised of three steps:

Step 1: Information and conception, information exchange on the concept of the programme with the potential beneficiary, identification of sectors part to the programme realised by the AFD, when that conception work is done, the French Ministry of Finance together with the technical support of the AFD present to the beneficiary authorities the elaborated proposal.

Step 2: Negotiation and signature of the C2D agreement lead by the Ministry of Finance, the Ministry of Foreign Affairs together with the AFD. Once the content of C2D agreement has been negotiated and finalised (fund amounts, schedule, implementation modalities, sectors and projects selected), the C2D contract is signed.

Step 3: Implementation of the C2D agreement is monitored either by the AFD or the Ministry of Foreign Affairs that oversees the implementation of the C2D programme in the beneficiary country.

The AFD Director in Islamabad mentioned that Pakistan is not eligible to that C2D programme yet, but the AFD is looking for funding environmental projects in Pakistan. However, the C2D programme doesn't have the benefit to relief debts for the beneficiary, it does reallocate the payments in local currency to support local projects only.

Case study: the REDD+ project in the Mé Region, Côte d'Ivoire

The Republic of Côte d'Ivoire and the France have funded a REDD+ pilot project as part of the implementation of the first two Debt Reduction and Development Contracts (C2D) with a contribution from the Regional Council of Mé. The 1st C2D was signed in December 2012, in Abidjan, for an amount of CFA 413.25 billion over the period 2012-2015. The 2nd C2D was signed in Paris in December 2014, for an amount of 738 billion CFA francs for the period 2014-2020.

Facing high deforestation, the Ivorian State and AFD decided to develop a project to fight against deforestation using a REDD+ approach. To date, there are only 3.4 million ha of forest left in Ivory Coast. In the Mé region (South-East) few forests still remain. It is with a view to preserving these forest resources that Mé was chosen as the first intervention region for this first REDD+ pilot project in Côte d'Ivoire.

This choice is also explained by the significant mobilisation and political involvement at the local level, through the Regional Council of Mé to protect remaining forests and secure a sustainable economic development. This involvement went as far as the Mé Council financed certain project activities, a rare commitment for a local authority with limited financial resources.

The REDD+ project was implemented by the French NGO Nitidae from 2017 to 2020, in close collaboration with the Permanent Executive Secretariat of REDD+ (MINEDD) and with all local stakeholders.

Objectives and content of the project: In addition to reducing deforestation within the classified forests of Mabi and Yaya, the project supported 2,250 cocoa planters towards more sustainable agricultural practices that consume less forest space, and the reforestation of 500 ha in the rural area. In addition, 3,500 ha of agricultural or forest land will benefit from land certificates and several local calls for tenders were dedicated to NGOs or craftsmen already engaged locally in fighting deforestation by reforesting .

5. CONCLUSION/RECOMMENDATIONS

From this different **Debt-for-Nature** Swap practices review some recommendations can be made:

i) *Adopt an intergovernmental approach and including relevant local authorities and NGOs*

The Ministry of Finance is crucial in the process as it leads the negotiations with creditor countries. The MoCC will need to build the case and explain the benefits of the Debt-for Nature Swap to the Ministry of Finance and other, potentially competing governmental agencies (as there are potentially other debt swaps available to the country, e.g., debt-for-aid, debt-for-equity).

The MoCC could be in charge to initiate and build up the programme and project portfolio, together with Provincial authorities, NGOs and civil society organisations.

ii) *Make sure that selected projects are aligned with the National REDD+ Strategy and National Determined Contribution (NDC)*

A credible expenditure programme that responds to both the debtor and creditor countries' priority concerns is key in attracting creditors' attention. Programmes or projects should contribute to national and provincial policies' objectives to gain support from all national and local actors.

The MoCC together with the National REDD Office (NRO), Provincial authorities shall first coordinate to scope potential forest projects that could benefit from the expected funding from the Debt-for-Nature Swap. To support either the governmental e.g., 10 Ten Billion Tree Tsunami Programme (TBTTP), a tree planting project that would cost a little over 125 billion rupees ($750 million), or other supporting projects for implementing more stringent measures to control deforestation, such as those projects listed in annex 1.

Same could be done to funding the Fund for Protected Area (FPA) with the NDC's aim of expanding the coverage of protected areas from 12 to 15% of the total land area by 2023, at an estimated cost of Rs. Billion, by notifying 15 new national parks covering a land area of over 7,300 square kilometres.

iii) Analysing the debt structure and expected revenue flows

A thorough and rigorous analysis of the debt portfolio is key to secure the support of the Ministry of Finance and of potential creditors. As seen, not all debts are eligible for conversion, the revenue from potential Debt-for-Nature Swap might be lower than the overall debt burden of the country.

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.

iv) Show institutional and financial capacity

The debtor country should be able to demonstrate that after the swap is agreed there will be no risk of default of the country and that it will have the fiscal capacity to finance the domestic expenditure from the swap.

v) Good governance of the financial institution, a trust fund

A dedicated forest fund, acting as trust fund, 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 will be to gain credibility domestically and internationally.

The Fund for Protected Area (FPA) established in 2009 by the federal government for the sustainable funding management of the parks, could play that role for the biodiversity component.

A permanent trust fund will gain solid expertise in fund management and technical capacities to implement forest projects. In addition, trust fund can reinvest the interest rate earned by the funds to provide additional capital for the mechanism.

Finally, it is recommended to adopt rules and decision-making process that are quick to disburse funds to selected projects.

vi) Harnessing additional sources of finance

The proposed expenditure projects should be designed to leverage finance from other sources. This is crucial, particularly for larger investment pipelines where potential Debt-for Nature Swap resources alone would not be sufficient.

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ANNEX – PROJECT DESCRIPTION

Following the approach that was used for the Pakistan Italian Debt Swap Agreement (PIDSA) funding the Central Karakorum National Park (CKNP), a national park under the responsibility of the Gilgit-Baltistan Forest, Wildlife & Environment Department (GBFWE). Same could apply using debt-swap to fund forest projects under the responsibility of Province governments, though it is a federal debt. The CKNP precedent shows the feasibility of that approach using federal debt swap to fund projects under the province governments responsibility.

1. Gilgit Baltistan - Diamer

Jurisdictional REDD+ Program details

Summary Description of the Jurisdictional REDD+ Program

A jurisdictional REDD+ program might be developed at Gilgit Baltistan province level.

Diamer District is quoted as one the most impacted area by deforestation in 2015 forest policy.

Jurisdictional Proponent

Gilgit Baltistan Forest Department would be the project proponent. According to law, the Forest Department is legally responsible for the forest management and supervision of all resources located within the province and regardless of the ownership.

For private forest, article 48 of Forest Act (2019) specifying that Private Forest owners are entitled to use, free of charge, for their own domestic, and agricultural requirements any trees and forest produce found in those Private Forests with the permission of Department, but they shall have no right or power to sell any tree, timber, brushwood or any other forest produce growing on Private Forests, except with the permission of the competent authority as specified by Government and under such terms and conditions as the competent authority may impose.

Other Entities Involved in the Jurisdictional REDD+ Program

Private landowners

As part of the Environmental and Social Management Framework, but also in the perspective of international certification, project proponents shall obtain the free, prior, and informed consent (FPIC) from local communities regarding REDD+ project activities.

Estimated GHG Emission Reductions and/or Removals

A national Forest Reference Emissions Level (FREL) has been published during readiness phase of the FCPF REDD+ program.

Subnational FREL at provincial level is available with following numbers for GB:

- 0.92 Mt CO^2 -e / year due to wood consumption over 2018

Jurisdiction Location and Geographic Boundaries

Gilgit Baltistan is one of the Pakistanis provinces. Jurisdictional REDD+ at subnational level should fit within province administrative delimitations.

Nested Projects

One project is identified so far: Diamer forest preservation, no overlap risk regarding the leakage areas.

Nested project Details

Type of project

Diamer project aims at reducing deforestation due to illegal logging across Diamer district. The main idea would be to financially compensate local population for not cutting trees over the next 30 years.

Proper avoided deforestation approach might be combined with enhancement of carbon stock, through afforestation/reforestation activities (A/R).

Program Boundary

Diamer district where all forests are privately owned and where illegal logging occur.

The boundary of the REDD activity must be clearly delineated and defined and include only land qualifying as forest for a minimum of 10 years prior to the project start date.

Project holder

Gilgit Baltistan Forest Department as local representative of Government as defined in the 2015 National Forest Policy.

Beneficiaries

Forest is 100% privately owned by local population which reach 300 000 inhabitants. 90% of the local population is involved in logging activities.

A Forest conservation Committee does exist and is an entity legally registered and representative of local population.

Benefit sharing mechanism

According to the law, current benefit sharing is 100% for community.

Article 51 from Forest Act (2019) addressing benefit sharing in private owned forests and specifying that the net profit, if any, arising from the Ecosystem Services of Private Forests inter alia carbon Financing, shall be paid to the local resident communities or owners after deducting at source, the essential Service Charges deductible in such cases.

Drivers of Deforestation and/or Degradation

- Illegal logging for timber sale: weight of 55%
- Local uses (firewood collection): weight of 27%
- Grazing weight of 12%

Activities to be implemented

Activities to reduce deforestation due to illegal logging:

- *Financial compensation relying on carbon market and other sources of payments for ecosystem services*

Activities to reduce deforestation due to local uses:

- *Promotion and distribution of energy efficient stoves*
- *Fast growing species to reduce current pressure, associated lo local watchmen to improve results. A/R activities relying on existing 7 tree nurseries from forest department.*

Income generating activities:

- *Mushroom (Morchella esculenta)*
- *Honey*
- *Chilgoza pine seeds where resource is available*
- *Medicinal & aromatic plants (Aaphalstum punjabianum, Psyllium plantago, Thymus serpyllum, Peganum harmala, junipers seeds,…)*
- *Ecotourism*
- *Hydroelectric power station*

Activities to implement before starting the project:

- *Demarcation of private forest is yet to be completed.*

Project crediting period

Project has to match current planning for private owned forests of Diamer working plan, which is divided into 3 phases of 10 years each. End of crediting period could be 2050.

Baseline might be updated every 10 years to be consistent with each phase of the working plan so that they could be updated at the same time.

Land Cover Maps and other available documents

- Land use mapping has been made based on Sentinel2 images dating from 2016.
- Working Plan for private forest GB (approved)
- Rules for Medicinal and Aromatic Plants (draft)
- Developed Allometric equations
- Published Forest Inventory
- Developed Biomass tables
- Developed Volume tables
- Calculated Basic wood densities/ expansion factors for 5 conifer and 1 broadleaved tree species

Additionality

10 Billion Trees Plantation Program is operating with A/R activities which are not additional and therefore cannot be included in the carbon benefit of the project.

FAO/IUCN (GEF fundings - Chilgoza) are operating in Gilgit with A/R activities. Lands that will have been eventually restored (assisted natural regeneration) are not additional and therefore cannot be included in the carbon benefit of the project.

Other benefits

Landslide prevention

Siltation reduction: providing sediment-free water to downstream hydropower stations (Diamer and Dasu dam projects)

Leakage

To be addressed through feasibility study

Leakage monitoring at provincial level is more than relevant, given that all forests are privately owned in Diamer district whilst they are protected forest in Gilgit and Astore.

2. Khyber Pakhtunkhwa - Kaghan guzara forest

Jurisdictional REDD+ Program details

Summary Description of the Jurisdictional REDD+ Program

A jurisdictional REDD+ program might be developed at PK province level.

Jurisdictional Proponent

Khyber Pakhtunkhwa Forest & Wildlife Department would be the proponent. According to the law, the Forest Department is legally responsible for the forest management and supervision of all resources located within the province and regardless of the land and forest ownership.

Other Entities Involved in the Jurisdictional REDD+ Program

Private landowners

As part of the Environmental and Social Management Framework, but also in the perspective of international certification, project proponents shall obtain the free, prior, and informed consent (FPIC) from local communities regarding REDD+ project activities.

Estimated GHG Emission Reductions and/or Removals

A national FREL has been published during readiness phase of the FCPF REDD+ program.

Subnational FREL at provincial level is available with following numbers for KP:

- 8.62 Mt CO^2 -e / year due to wood consumption over 2018

Jurisdiction Location and Geographic Boundaries

Khyber Pakhtunkhwa is one the Pakistanis province. Jurisdictional at subnational level should fit within province administrative delimitations.

Nested Projects

Two projects identified so far:

- Kaghan Guzara Forest

- Chilgoza pine (KP and Balochistan)

These two project are located in two distant areas of KP, avoiding any risk of overlap in leakages areas.

Nested project Details

Type of project

Guzara project aims at reducing deforestation due to local uses.

Proper avoided deforestation approach might be combined with enhancement of carbon stocks, through afforestation/reforestation activities (A/R).

Program Boundary

REDD+ PES pilot area comprises the whole Kaghan Forest Division with a total area of 258,151 ha

The boundary of the REDD activity must be clearly delineated and defined and include only land qualifying as forest for a minimum of 10 years prior to the project start date.

Project holder

Khyber Pakhtunkhwa Forest & Wildlife Department. Guzara Forests are privately owned forests but managed by the provincial forest department.

Beneficiaries

Village Development Committee (incl. Joined Forest Management Committee & Women Development Committee) which is an entity legally registered and representative of local populations.

Benefit sharing mechanism

Current benefit sharing 80% for community. Such an agreement has yet to be formalized through a contract signed between Khyber Pakhtunkhwa Forest & Wildlife Department and a legally registered entity representative of local communities.

Drivers of Deforestation and/or Degradation

- Logging for timber
- Grazing activities
- Wood for house construction
- Firewood

Activities to be implemented

Activities to reduce deforestation due to logging for timber:

- *Improved forest management (UN-REDD "Forest management activities which result in increased carbon stocks within forests and/or reduce GHG emissions from forestry activities when compared to business-as-usual forestry practices").*
- *Wood substitutes*

Activities to reduce deforestation due to local uses:

- *Promotion and distribution of energy efficient stoves*
- *Fast growing species to reduce current pressure*
- *Wood waste briquettes*
- *Stable feeding & improved fodder species*
- *Rules for nomadic breeders*

Other income generating activities:

- *Mushrooms*
- *Ecotourism,*
- *Medicinal plants*
- *Resin from pine (Terebinthinate)*

Activities to implement before starting the project:

- *Demarcation of private forest is yet to be completed. On-going conflict with local population.*

Project crediting period

Project has to match current planning for forest working plan. Given the latter is planned for 10 years period, it would be much easier if it the project duration was proportional (10, 20, 30, 40,…). REDD+ PES document proposed a 30 years crediting period with an end in 2048.

Baseline might be updated every 10 years to be consistent with each phase of the working plan so that they could be updated at the same time.

Land Cover Maps and other available documents

In the REDD+ design document a forest cover map is available. This map delineates the different types of forest which are Guzara, Reserved and undemarcated forests.

Additionality

Although mentioned in the REDD+ PES design document, The Billion Trees Afforestation Project (BTAP) is operating with A/R activities which are not additional and cannot be included in the carbon benefit of the project. The enhancement in carbon stocks on an area of 11,816 ha counting plantings from 2018 cannot be taken in account.

Other benefits

Landslide prevention

Siltation reduction: providing sediment-free water to downstream hydropower stations (Mangla, Karot, Azad Pattan,…)

Leakage

To be addressed through feasibility study

3. KP/Bal – chilgoza PINE

Project details

Proponent

Khyber Pakhtunkhwa Forestry, Environment & Wildlife Department and Balochistan Forest Department would be the proponents.

According to the law, the Forest Department is legally responsible for the forest management and supervision of all resources located within the province and regardless of the ownership (protected, reserved and private).

Other Entities Involved in the project

Private landowners. Chilgoza forest is the property of Sherani tribe living on both sides of the provincial borders. The sub-tribes have divided their Chilgoza forests up to household level.

WWF already hold a project addressing deforestation and degradation in High Conservation Value Chilgoza Pine forests

Type of project

The world's largest pure stands of chilgoza forests (more than 29,000ha) are found in the Sherani and Zhob districts.

This project would aim at enhancing forest carbon stocks by reducing deforestation as well as assisting natural regeneration.

Although there is a proper avoided deforestation potential, the enhancement of carbon stock has to be included through afforestation/reforestation activities (A/R).

Project Boundary

Chilgoza Pine Forest ecosystem is located in Suleiman Mountain Range, (SMR), which is southern extension of Hindu Kush Mountain system and lies at the junction of three provincial borders of Balochistan (Sherani district), Khyber Pakhtunkhwa (South Waziristan) and Punjab

Three locations in Balochistan: Shiriani, Zhob and Musakhel

Project holder

- Balochistan Forest Department
- Khyber Pakhtunkhwa Forest & Wildlife Department

Beneficiaries

Local population living in the vicinity of Chilgoza pine forests. Estimate 100K inhabitants.

Forest is mostly privately owned by tribal communities. There are only five notified State Forests in the district namely: Kapip, Shahwan Khawe, Shen Ghar, Khawaza, and Merhail with total forest area of 6,277 out of 29 172hectares.

Benefit sharing mechanism

To be defined

Drivers of Deforestation and/or Degradation

No outstanding deforestation but significative degradation (Forest cover at Kohe Suleman in district Sherani increased by 2% from 2000 to 2019 – Source IUCN ROAM 2020).

Main drivers of forest degradation are grazing/pasture activities which are preventing from natural regeneration, following by fuelwood collection, illegal logging…

Activities to be implemented

Activities to improve natural regeneration

- *Local watchmen to prevent grazing from reducing RNA*
- *Seeds collection*
- *Value addition/value chain improvement of chilgoza pines*
- Reducing wood consumption
- Safety equipment

Income generating activities:

- *Value addition/value chain improvement of chilgoza pines*
- Non impacting collection methods (trees used to be cut down)
- Improved process for seeds extraction, drying, roasting, packaging….
- Orchards (most efficient income generating activity in terms of cost/benefit ratio – ROAM 2020)
- beehives

Activities to implement before starting the project:

- *A legal entity to represent tribal community yet to be created (Five union councils existing: Shingha, Dana Sar, Ahmadi Dargah, Sorlaki and Mani Kwa).*

Project crediting period

To be defined

Land Cover Maps and other available documents

On-going project from FAO and funded by GEF addressing Chilgoza pine economic sector: Land cover maps developed under REDD+ readiness project are available

Additionality

10 Billion Trees Plantation Program and FAO/IUCN (GEF fundings) are operating in Sherani with A/R activities. Lands that will have been eventually restored (assisted natural regeneration) are not additional and therefore cannot be included in the carbon benefit of the project.

Other benefits

Water quality for local population, agriculture, and hydro power station

Biodiversity (wild fauna)

Leakage

To be addressed through feasibility study

4. Balochistan / juniper ecosystem

Jurisdictional REDD+ Program details

Summary Description of the Jurisdictional REDD+ Program

A jurisdictional REDD+ program might be developed at Balochistan province level.

Jurisdictional Proponent

Balochistan Forest Department would be the proponent.

Other Entities Involved in the Jurisdictional REDD+ Program

Private landowners

Estimated GHG Emission Reductions and/or Removals

A national FREL has been released during readiness phase of the FCPF REDD+ program.

Subnational FREL at provincial level is available with following numbers for Balochistan:

- 2.47 Mt CO^2 -e / year due to wood consumption over 2018

Jurisdiction Location and Geographic Boundaries

Balochistan is one the Pakistanis province. Jurisdictional at subnational level should fit within the province administrative delimitations.

Nested Projects

One project identified so far: Juniper ecosystem preservation (cf. below)

Nested project Details

Type of project

Juniper ecosystem project aims at reducing deforestation due to local uses across the four patches of Juniper.

Proper avoided deforestation approach.

Program Boundary

The Ziarat Juniper Forest occurs at elevations between 1,980m and 3,350m ASL and is dominated by Juniperus excelsa polycarpos, a species native to Balochistan.

Area covered with Juniper is estimated to 100 000ha (c.f. The UNDP/GEF Project 'Mainstreaming Biodiversity Conservation into production systems in the Juniper Forest Ecosystem')

Project holder

Balochistan Forest Department

Beneficiaries

Local population

Benefit sharing mechanism

TBD

Drivers of Deforestation and/or Degradation

By decreasing priority:

- Land use change
- Grazing
- Logging for timber/wood
- Fuelwood

Activities to be implemented

Activities to reduce deforestation due to local uses:

- *Promotion and distribution of energy efficient stoves*
- *Fast growing species (poplar) to reduce current pressure*

Income generating activities:

- *Tree plantation with cash species: cherry and apple*
- *Ecotourism*
- *Medicinal plants (thymus…)*

Project crediting period

TBD

Land Cover Maps and other available documents

Although land cover maps are available for Junipers in Ziarat district, the information has not been made available so far. The report to refer to is « Total Inventory of Notified State Forest of Districts Ziarat along with GIS mapping »

Additionality

TBD

Other benefits

TDB

Leakage

TBD