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Debt-for-Nature Initiatives and the Tropical Forest Conservation Act (TFCA): Status and Implementation

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Summary

In the late 1980s, extensive foreign debt and degraded natural resources in developing nations led to the creation of debt-for-nature initiatives that reduced debt obligations, allowed for debt repayments in local currency as opposed to hard currency, and generated funds for the environment. These initiatives, called *debt-for-nature swaps* (hereinafter referred to as *debt-for-nature transactions*) typically involved restructuring, reducing, or buying a portion of a developing country's outstanding debt, with a percentage of proceeds (in local currency) being used to support conservation programs within the debtor country. Most early transactions involved debt owed to commercial banks and were administered by nongovernmental conservation organizations and referred to as *three-party transactions*. Since 1987, three-party transactions involving countries all over the world have generated more than an estimated $167 million in local currency for conservation projects. Other debt-for-nature initiatives involved official (public) debt and were administered by creditor governments directly with debtor governments (termed *bilateral transactions*).

In the early 1990s, the United States initiated a program called the Enterprise for the Americas Initiative (EAI), which involved debt-for-nature transactions. The United States restructured, and in one case sold, debt equivalent to a face value of over $1 billion owed by Latin American countries; these transactions were authorized by Congress as part of the EAI, which broadened the scope of debt transactions to include a number of social goals. Nearly $177 million in local currency for environmental, natural resource, health protection, and child development projects within debtor countries was generated from these transactions. The model for debt-for-nature transactions, outlined in the EAI, was used in the Tropical Forest Conservation Act (TFCA; P.L. 105-214; 22 U.S.C. 2431) to include countries around the world with tropical forests. Under this program, debt can be restructured in eligible countries and funds generated from the transactions are used to support programs to conserve tropical forests within the debtor country.

Since 1998, $233.4 million has been used under the TFCA to restructure loan agreements in 14 countries (20 transactions), and over $339 million will be generated for tropical forest conservation at the conclusion of these agreements. The TFCA was authorized to receive appropriations through FY2007, but no funds have been appropriated for the program since FY2015 and no new deals are anticipated. The TFCA is being considered for reauthorization in the 114th Congress (S. 566).

Debt-for-nature transactions generally are viewed as a success by conservation organizations and debtor governments because of the funds generated for conservation efforts. The appeal of debt-for-nature transactions has been tempered in recent years, however, by higher debt prices on secondary markets and fewer or no appropriations. As a result, fewer transactions have taken place. This report provides a description of debt-for-nature transactions and a summary of the TFCA.

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Background Information

Debt-for-nature initiatives were conceived to address the rapid loss of resources and biodiversity in developing countries that were heavily indebted to foreign creditors. Conservationists had noted that the pressure to pay off foreign debts in hard currency was leading to increased levels of natural resource exports (i.e., timber, cattle, minerals, and agricultural products) at the expense of the environment. In many cases, indebted developing countries had difficulty meeting their hard currency debt obligations and defaulted. Reducing foreign debt and allowing for portions of it to be paid with local currency while increasing funds for the environment was thought to improve environmental conditions in developing countries and had the advantage of relieving the debtor country's difficulties in procuring sufficient hard currency to pay off its debts.[1] Money generated from debt-for-nature transactions has been used to fund a variety of projects, ranging from national park protection in Costa Rica to supporting ecotourism in Ghana and conserving tropical forests in Bangladesh.

Since 1993, there has been a declining trend in the number of debt-for-nature transactions involving official (public) and private funds. Accounting changes requiring new appropriations to support official (public) debt transactions in creditor countries such as the United States, and a higher price of commercial debt on secondary markets, are two reasons suggested for the decline of debt-for-nature transactions. While Congress has periodically authorized U.S. participation in three-party debt-for-nature transactions and has supported two bilateral debt-for-nature initiatives, appropriations to support these types of efforts have generally diminished over the years.

Authority for Debt-for-Nature Initiatives

Early debt-for-nature legislation concentrated on understanding and promoting third-party debt-for-nature transactions (see **Appendix** for legislation summaries and *United States Code* citations). Congress in 1989 directed the Secretary of the Treasury to ask the U.S. Executive Director of the World Bank to develop a pilot debt-for-nature program and other ways of reducing debt owed by foreign countries while generating funds for the environment. A subsequent law, the International Development and Finance Act of 1989, authorized the U.S. Agency for International Development (USAID) to make grants to nongovernmental organizations (NGOs) to purchase debt in three-party transactions. Official (public) P.L. 480 debt owed to the United States by eligible Latin American countries was authorized to be reduced by the 1990 farm bill (P.L. 101-624; 7 U.S.C. 1738b). The 102nd Congress authorized debt reduction for foreign assistance loans made by USAID (P.L. 102-549; 22 U.S.C. 2430 and 2421), the Export-Import Bank (Ex-Im Bank; P.L. 102-429; 12 U.S.C. 635i-6), and the Commodity Credit Corporation (CCC; P.L. 102-549; 22 U.S.C. 2430 and 2421). Together, the P.L. 480, USAID, Ex-Im, and CCC debt-reduction authorizations were undertaken as part of President George H. W. Bush's Enterprise for the Americas Initiative. In 1996, USAID was further authorized by Congress to conduct swaps, buybacks, and cancellations of debt owed to the United States by eligible Latin American and Caribbean countries (P.L. 104-107). In 1998, the Tropical Forest Conservation Act (TFCA; P.L. 105-214; 22 U.S.C. 2431) was passed, allowing debt swaps, buybacks, and restructuring to generate funds for tropical forest conservation worldwide.

Funding for the TFCA was reauthorized by Congress in 2004 (P.L. 108-323). In the 114th Congress, S. 566 would authorize appropriations for the TFCA of $20.0 million annually from

[1] Thomas E. Lovejoy III, "Aid Debtor Nations' Ecology," *New York Times*, October 4, 1984, Sec. A, p. 31.

FY2015 to FY2018. The bill also would expand the TFCA to include coral reefs and associated coastal marine ecosystems.[2]

Debt-for-Nature Initiatives and Their Mechanisms

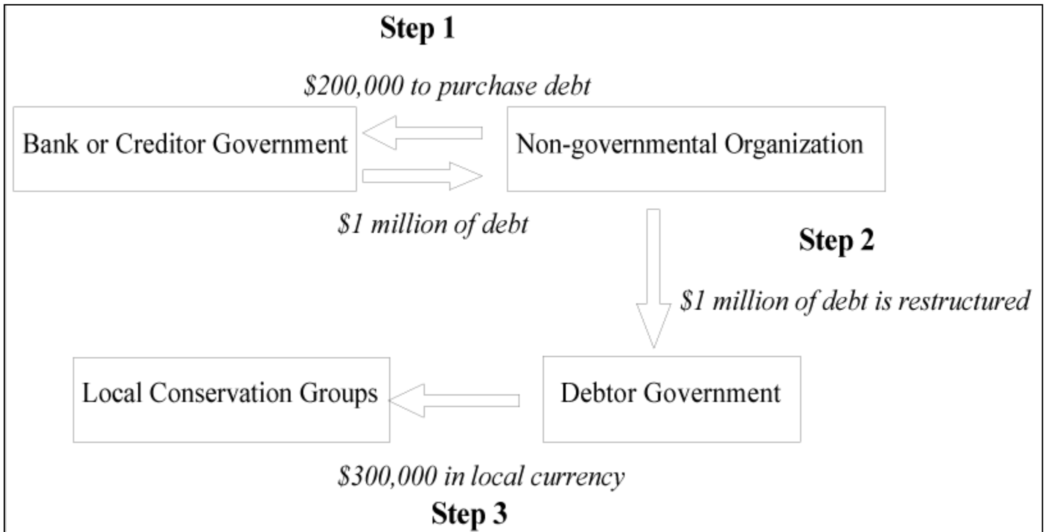
Three-Party Transactions

Three-party debt-for-nature transactions, involving nongovernmental organizations such as The Nature Conservancy and Conservation International, were the first debt-for-nature agreements to be formed. In a three-party swap, a conservation group purchases a hard currency debt owed to commercial banks on the secondary market or in some cases a public (official) debt owed to a creditor government at a discounted rate compared to the face value of the debt, and then renegotiates the debt obligation with the debtor country.[3] The debt is generally sold back to the debtor country for more than it was purchased for by the NGO, yet less than what it was on the secondary market. The proceeds generated from the renegotiated debt, to be repaid in local currency, are typically put into a fund that often allocates grants to local environmental organizations for conservation projects (see **Figure 1**). In these cases, the fund is administered by the conservation organization, representatives from local environmental groups, and the debtor government. Money to buy the debt initially may come from the nongovernmental organization, governments, banks, or other private organizations.

[2] S. 566 defines associated coastal marine ecosystems as "any coastal marine ecosystem surrounding, or directly related to, a coral reef and important to maintaining the ecological integrity of that coral reef, such as seagrasses, mangroves, sandy seabed communities, and immediately adjacent coastal areas."

[3] Sometimes debt is donated to the nongovernmental organization (NGO) in the three-party swap.

Figure 1. An Illustrative Example of a Three-Party Debt-for-Nature Swap Agreement



- Step 1 = An outstanding debt is sold to a NGO at a discounted rate (e.g., 20% of a face value of $1 million, which is $200,000).
- Step 2 = The debt is cancelled by the NGO as part of an agreement that requires the debtor country to provide funds in local currency equivalents for local conservation groups (e.g., 30% of the original face value, which is $300,000).
- Step 3 = The debtor country provides the agreed to funds to local conservation groups.

Source: Congressional Research Service.

In 1989, Congress authorized the United States Agency for International Development (USAID) to provide assistance to nongovernmental organizations to purchase the commercial debt of foreign countries as part of debt-for-nature agreements (P.L. 101-240; 22 U.S.C. 2282-2286). Several nongovernmental organizations participated in debt-for-nature transactions with financial assistance from USAID; however, specific information on funds given by USAID to support three-party debt-for-nature transactions was not available.

While debt initiatives conducted with three-party transactions are numerous, they have resulted in less reduction in total debt than the debts swapped under bilateral agreements (government-to-government), and slightly less in conservation funds generated. In total, approximately $200 million in debt (face value) has been reduced, restructured, or swapped using this mechanism, generating approximately $167 million in local currency for conservation purposes (see **Table 1**).

Table 1. Selected Countries Participating in Three-Party Debt-for-Nature Transactions, 1987-Present (excluding TFCA transactions)

(in thousands of dollars)

Country	Year	Purchaser	Cost	Face Value of Debt	Conservation Funds Generated
Bolivia	1993	TNC/WWF	$0	$11,500	$2,860
	1987	CI	100	650	250
Total Bolivia			**100**	**12,150**	**3,110**
Brazil	1992	TNC	**748**	**2,200**	**2,200**
Costa Rica	1991	RA/MCL/ TNC	360	600	540
	1990	SW/WWF/ TNC	1,953	10,574	9,603
	1989	TNC	784	5,600	1,680
	1989	Sweden	3,500	24,500	17,100
	1988	Holland	5,000	33,000	9,900
	1988	NPF	918	5,400	4,050
Total Costa Rica			**12,515**	**79,674**	**42,873**
Dominican Republic	1990	PRCT/TNC	**116**	**582**	**582**
Ecuador	1992	Japan	NA	NA	1,000
	1989	WWF/FN	640	5,400	5,400
	1987	WWF	354	1,000	1,000
Total Ecuador			**994**	**6,400**	**7,400**
Ghana	2000	CI	80	100	90
	1991	CI/SI	250	1,000	1,000
Total Ghana			**330**	**1,100**	**1,090**
Guatemala	1992	CI/USAID	1,200	1,334	1,334
	1991	TNC	75	100	90
Total Guatemala			**1,275**	**1,434**	**1,424**
Jamaica	1991	TNC/USAID/ PRCT	**300**	**437**	**437**
Madagascar	2008	WWF/France	n/a	n/a	20,000
	1996	WWF/Netherlands Development Corporation	n/a	2,000	1,500
	1994	WWF/JPM	0	1,341	1,072
	1994	CI	50	200	160
	1993	WWF	909	1,868	1,868
	1993	CI	1,500	3,200	3,200

Country	Year	Purchaser	Cost	Face Value of Debt	Conservation Funds Generated
	1991	CI/UNDP	59	118	119
	1990	WWF	446	919	919
	1989	WWF/USAID	950	2,111	2,111
Total Madagascar			**3,914**	**11,757**	**30,949**
Mexico	1998	CI	256	550	318
	1996	CI	192	391	254
	1996	CI	327	496	443
	1996	CI	440	671	561
	1995	CI/USAID	246	488	337
	1994	CI	399	480	480
	1994	CI	236	280	280
	1994	CI	248	290	290
	1993	CI	208	252	252
	1992	CI/USAID	355	441	441
	1991	CI	0	250	250
	1991	CI	183	250	250
Total Mexico			**3,092**	**4,838**	**4,155**
Nigeria	1991	NCF	**65**	**150**	**93**
Peru	1993	WWF	n/a	2,860	1,573
	2002	WWF, CI, TNC, U.S.	5,500	14,000	10,600
Total Peru			**5,500**	**16,860**	**12,173**
Philippines	1993	WWF	13,000	19,000	17,100
	1992	WWF/USAID	5,000	10,000	9,000
	1990	WWF/USAID	439	900	900
	1989	WWF	200	390	390
Total Philippines			**18,639**	**30,290**	**29,090**
Poland	1990	WWF	**11**	**50**	**50**
Seychelles	2015	TNC/PC	**n/a**	**30,000**	**28,500**
Zambia	1989	WWF	**454**	**2,270**	**2,500**

Sources: Several sources, including M. Moye, *Commercial Debt-for-Nature Swaps: Summary Table* (Washington, DC: World Wildlife Fund, 2003); M. Guerin-McManaus, *Ten Years of Debt for Nature Swaps 1987-1997* (Washington, DC: Conservation International, 2000); and World Bank, *World Debt Tables, 1996* (Washington, DC: The World Bank, 1996).

Notes: A cost of $0 indicates that funds were written off by the bank to restructure the debt.
Funds generated may be cash or bonds. Figures given do not include interest earned over the life of the bonds.
Full titles of abbreviations are given below. Grand total given is an estimate since some figures were not available.
n/a = not available.
CABEI = Central American Bank for Economic Integration

CI = Conservation International
FN = Fundacion Natura
JPM = J. P. Morgan Chase and Co.
MBG = Missouri Botanical Garden
MCL = Monteverde Conservation League
NCF = Nigerian Conservation Foundation
NPF = National Parks Fdn. of Costa Rica
PC = Paris Club
PRCT = Puerto Rican Conservation Trust
RA = Rainforest Alliance
SI = Smithsonian Institution
TNC = The Nature Conservancy
UNDP = United Nations Development Prog.
U.S. = U.S. federal government
USAID = U.S. Agency for International Development
WWF = World Wildlife Fund

Bilateral and Multilateral Debt-for-Nature Initiatives

Bilateral debt transactions are conducted with official (public) funds directly between the creditor and debtor governments. The creditor government determines the criteria for eligibility, which usually involve the existence of certain financial and political conditions in the debtor country. Debt agreements are usually cancelled and then restructured to extend payback periods, or in some cases, debt is bought back by the debtor country for a discounted price. Money for the environment can be generated through interest payments from the debtor country if the debt is restructured, or from a percentage of the buyback price. Multilateral debt-for-nature agreements have also been conducted between more than one creditor country and a debtor country (see **Table 2**). Poland, for example, benefitted from a multilateral debt-for-nature agreement from 1991 to 1997. (See **Table 2**.)

Table 2. Countries Other than the United States Participating in Bilateral and Multilateral Debt-for-Nature Initiatives

(in thousands of dollars, except where noted)

Creditor	Debtor Country	Year	Face Value of Debt Treated	Conservation Funds Generated
Canada	Columbia	1993	$12,000	$12,000
	El Salvador	1993	7,500	6,000
	Honduras	1993	24,900	12,450
	Nicaragua	1993	13,600	2,700
	Peru	1994	11,250	3,800
Belgium	Bolivia	1992	13,000	n/a
Finland	Poland	1990	17,000	17,000
	Peru	1995	18,900	8,100
France	Egypt	1992	n/a	11,600
	Philippines	1992	n/a	4,000
	Poland	1993	66,000	66,000
	Cameroon	2006	n/a	25,000
	Mozambique	2015	17,500 (in	2,000 (in euros)

Creditor	Debtor Country	Year	Face Value of Debt Treated	Conservation Funds Generated
			euros)	
Germany	Peru	1994	16,079	6,100
	Jordan	1995	13,400	6,700
	Jordan	1995	22,700	11,300
	Philippines	1996	5,800	1,800
	Vietnam	1996	18,200	5,400
	Bolivia	1997	3,700	1,150
	Honduras	1999	1.068	534
	Peru	1999	5,140	2,060
	Vietnam	1999	16,400	5,000
	Jordan	2000	43,600	21,800
	Bolivia	2000	15,800	3,200
	Jordan	2001	11,300	5,700
	Vietnam	2001	7,000	n/a
	Syria	2001	31,700	15,900
	Ecuador	2002	9,500	3,081
	Ecuador	2002	10,200	3,235
	Madagascar	2003	25,092	14,843
	Indonesia	2003	n/a	n/a
	Indonesia	2004	29,250	n/a
	Indonesia	2006	13.7 (in euros)	6.3 (in euros)
	Indonesia	2006	13.7 (in euros)	6.3 (in euros)
	Indonesia	2007	n/a	n/a
	Mozambique	2014	n/a	10,000 (in euros)
Holland	Peru	1996	n/a	n/a
	Costa Rica	1996	14,100	14,100
	Costa Rica	1988	33,000	9,900
Italy	Poland	1998	32,000	32,000
	Egypt	2001	n/a	n/a
Norway	Egypt	1993	17,300	n/a
	Egypt	1993	6,200	n/a
	Nigeria	1993	10,200	n/a
	Poland	2000	27,000	27,000
Spain	Costa Rica	1999	5,222	2,180
Sweden	Costa Rica	1989	24,500	17,100

Creditor	Debtor Country	Year	Face Value of Debt Treated	Conservation Funds Generated
	Tunisia	1992	1,100	1,100
	Tunisia	1993	520	520
	Bolivia	1993	35,400	3,900
	Poland	1997 & 1999	13,000	13,000
Switzerland	Peru	1992	130,800	32,600
	Tanzania	1993	22,200	3,300
	Bolivia	1993	35,400	1,365
	Poland	1993	48,000	48,000
	Honduras	1993 &1997	42,030	8,430
	Ecuador	1994	46,300	4,524
	Bulgaria	1995	16,700	16,200
	Egypt	1995	23,000	18,000
	Guinea Bissau	1995	8,400	400
	Philippines	1995	16,100	16,100
U.K.	Nigeria	1993	7,300	n/a
	Tanzania	1993	15,400	15,400

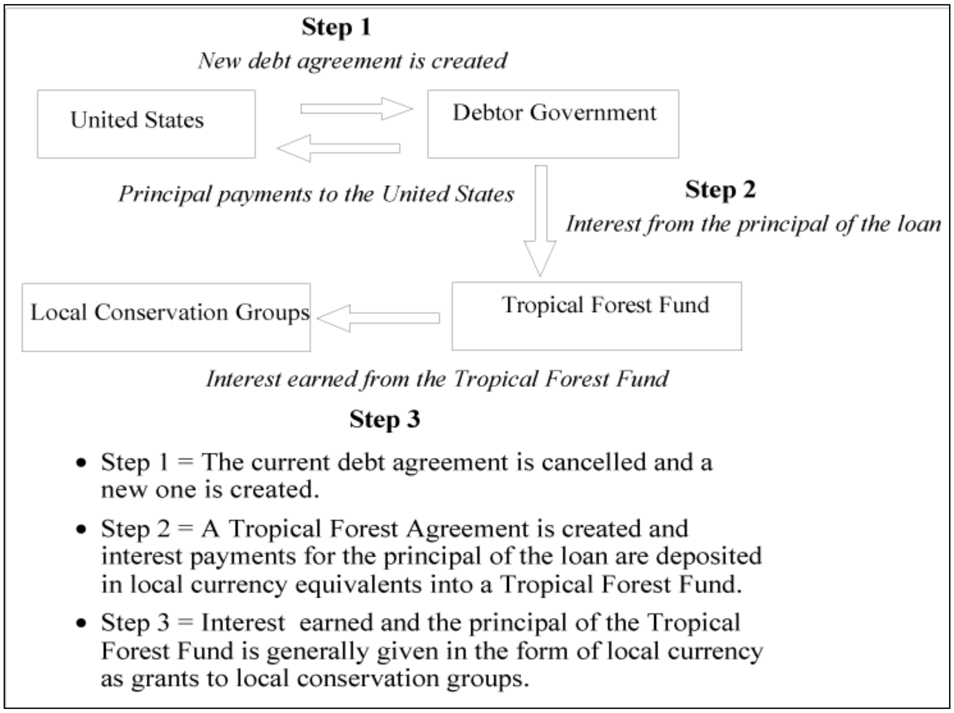
Sources: Various sources and R. Curtis. "Bilateral Debt Conversions for the Environment, Peru: An Evolving Case Study," IUCN World Conservation Congress, Montreal (1996).

Note: n/a = information not available.

U.S. Bilateral Debt-for-Nature Initiatives

The model for bilateral debt-for-nature agreements conducted by the United States was first defined in 1990 by the Enterprise for the Americas Initiative (EAI; Title 15, Section 1512 of the Food, Agriculture Conservation and Trade Act of 1990, "1990 farm bill," P.L. 101-624; 7 U.S.C. 1738) and has since been expanded numerous times (see **Appendix**). It was last amended by the Tropical Forest Conservation Act (TFCA) in 1998 (P.L. 105-214; 22 U.S.C. 2431).

Figure 2. An Example of a Bilateral Debt-for-Nature Transaction Modeled After the TFCA



Source: Congressional Research Service.

The EAI legislation authorizes the sale, reduction, cancellation, and country buyback of eligible debt of Latin American and Caribbean countries that meet certain criteria. The debt authorized to be treated include the following types:

- P.L. 480 debt[4] (P.L. 101-624; 7 U.S.C. 1738m, p-r, etc.)
- AID debt[5] (P.L. 102-549; 22 U.S.C. 2430 and 2421)
- CCC debt[6] (P.L. 102-549; 22 U.S.C. 2430 and 2421)
- Exim debt[7] (P.L. 102-429; 12 U.S.C. 635i-6)[8]

Debtor countries must meet certain political and macroeconomic criteria in order to be eligible. Eligible countries are required to (1) have a democratically elected government, (2) not support terrorism, (3) not fail to cooperate with the United States on drug control, and (4) not engage in gross violations of human rights. From an economic perspective, eligible countries are required to have (1) an International Bank for Reconstruction and Development (IBRD) or International

[4] P.L. 480 "Food for Peace" loans were low-interest loans given to developing countries to purchase U.S. agricultural products.

[5] U.S. Agency for International Development (USAID) foreign assistance loans.

[6] Commodity Credit Corporation (CCC) loans are given to developing countries to enable them to import U.S. agricultural products.

[7] Export-Import (Ex-Im) Bank loans are made to foreign importers of U.S. goods and services.

[8] Although debt under the P.L. 480 program was the first to be authorized for debt-for-nature transactions, authorization quickly followed for reduction of debt owed to the United States under three other programs: (1) CCC programs, (2) Export-Import Bank loans, and (3) foreign aid loans administered by USAID.

Development Association (IDA) structural or sectoral adjustment loan or its equivalent, (2) a macroeconomic agreement with the International Monetary Fund or equivalent, and (3) instituted investment reforms, as evidenced by a bilateral investment treaty with the United States, an investment sector loan, or progress towards implementing an open investment regime. Each country that participates in the EAI must enter into an Americas Framework Agreement with the United States to establish an Americas Trust Fund and create enforcement mechanisms to insure payments into the fund and prompt disbursements out of the fund.[9] Funds can be used to support environmental, natural resource, health protection, and child development programs within the debtor country.

Debt swaps, buybacks, and restructuring are three mechanisms authorized to conduct debt-for-nature transactions under the EAI. Seven of the eight countries that have participated in debt-for-nature transactions under the EAI used the debt-restructuring mechanism to generate environmental funds (see **Table 3**); only Peru took advantage of the debt buyback option. In a debt-restructuring agreement, the original debt agreement is cancelled (e.g., a percentage of the face value of the debt could be reduced) and a new debt agreement is created with a provision for an annual amount of money (in local currency) to be deposited into an environmental fund. In 1992, for example, the United States reduced a $310 million (face value) debt owed by Colombia by 10% in return for a total deposit of $41.6 million in local currency into an environmental fund managed by the Colombian government over 10 years.[10] In a debt buyback, the debtor country purchases its debt at a reduced price. The lesser of either 40% of the repurchase price or the difference between the face value of the debt and the repurchase price is deposited in local currency into an environmental trust to support environmental and child support programs in the debtor country (P.L. 104-107, Title V, Sec. 574). For example, in 1998 Peru took advantage of this program and bought back $177 million in debt for $57 million, generating nearly $23 million (40% of the repurchase price) in local currency funds for conservation and child development programs. For all eight debtor countries, more than $1 billion (face value) of debt was reduced from a total debt of $1.9 billion, and almost $180 million of conservation funds were generated under the guidelines of the EAI (see **Table 3**).

All deposits into EAI funds have stopped, and some countries continue to award grants from their funds. Five transactions under the EAI continued to operate in 2015 (Chile, Uruguay, and Bolivia have been concluded). Argentina's program expired in 2015. These programs support small projects with grants and monitor existing projects that have been funded. Some examples of projects include coastal zone marine management and hurricane relief projects in Jamaica, environmentally based development projects in the Peruvian Andes, and community conservation grants in Bolivia.[11]

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[9] The Americas Trust Fund can be either an endowed fund or a sinking fund depending on the agreement reached by the United States and the debtor country. Interest payments made by debtor countries on their new restructured loans are deposited into the fund. These payments form the principal of the fund, and interest earned on this principal and the principal itself can be used to fund environmental, community development, and child survival and development programs.

[10] R. Curtis, "Bilateral Debt Conversions for the Environment, Peru: An Evolving Case Study," IUCN World Conservation Congress, Montreal (1996).

[11] USAID, *Enterprise for the Americas Initiative and the Tropical Forest Conservation Act: 2014 Financials Report*, March 2015.

Table 3. U.S. Bilateral Debt-for-Nature Transactions Under EAI

(in thousands of dollars)

Country	Year	Debt Reduction	Original Value of Debt	Conservation Funds Generated	Duration (years)
Bolivia	1991	$30,700	$38,400	$21,800	15
El Salvador	1992	469,900	614,000	41,200	20
Uruguay	1992	3,700	34,400	6,190	12
Columbia	1992	31,000	310,000	41,600	10
Chile	1991 & 1992	30,600	186,000	18,700	10
Jamaica	1991 & 1993	310,800	405,400	21,500	19
Argentina	1993	3,800	38,100	3,100	14
Peru	1998	177,000	350,000	22,840	n/a
TOTAL		**1,057,500**	**1,976,300**	**176,930**	

Source: USAID, *Enterprise for the Americas Initiative and the Tropical Forest Conservation Act: 2014 Financials Report*, March 2015.

Note: EAI = Enterprise for the Americas Initiative (Title 15, Section 1512 of the Food, Agriculture Conservation and Trade Act of 1990, "1990 Farm Bill," P.L. 101-624; 7 U.S.C. 1738.)

Tropical Forest Conservation Act

Acknowledging that tropical rainforests were valuable for preserving biodiversity, reducing atmospheric carbon dioxide, and regulating hydrological cycles, Congress sought to expand the EAI authorization to countries throughout the world with tropical forests. The result was the 1998 Tropical Forest Conservation Act (TFCA, P.L. 105-214; 22 U.S.C. 2431), which was established to generate funds to conserve tropical forests by reducing external debt in countries with such forests. TFCA is an extension of the Enterprise for the Americas Act, in that it allows debt swaps, debt restructuring, and debt buybacks to generate conservation funds. These funds, however, are specifically designated for the conservation of tropical forests and are not confined to Latin America. To date, 14 countries have participated in this program, establishing 20 agreements (several countries have two agreements) that will reduce a total of at least $90.0 million from the face value of their debts to the United States and generate $310.2 million in local currency in the next 13 years for tropical forest conservation projects (see **Table 4**). To date, the Republic of the Philippines completed the largest ever debt-for-nature transaction under the TFCA in 2013.

Subsidized Debt Swap

In 2001, a different form of a debt-for-nature transaction emerged under the TFCA. The Nature Conservancy and the United States agreed to share costs to buy down a portion of debt that Belize owed to the United States. This partnership in debt-for-nature transactions is referred to as a *subsidized debt swap*. In a subsidized debt swap, an NGO generally matches a portion of the U.S. government contribution toward a debt-for-nature transaction. For example, in a transaction with Panama in 2003, the U.S. government provided $5.6 million and the Nature Conservancy provided $1.2 million to reduce Panama's debt by $10 million and generate $10 million in conservation funds. The transaction is completed when three agreements are signed: (1) the U.S. government and the beneficiary country sign a debt-restructuring agreement; (2) the U.S. government and the NGO sign an agreement to transfer NGO funds; and (3) the NGO and the beneficiary country sign a Forest Conservation Agreement.[12] In a subsidized swap, the U.S. government is *not* a signatory to the Forest Conservation Agreement, yet it generally has representatives on the oversight committee.[13]

Table 4. U.S. Bilateral Debt-for-Nature Transactions Under TFCA

(in thousands of dollars)

Country[a]	Year	Budget Cost[b]	Private Funds Leveraged[c]	Face Value Reduction of Debt	Conservation Funds Generated	Duration (years)
Bangladesh	2000	$6,000	$0.0	$600	$8,500	18
Belize	2001	5,500	1,300	1,400	9,000	26
El Salvador	2001	7,700	0.0	3,000	14,000	26
Peru I	2002	5,500	1,100	3,700	10,600	12
Philippines I	2002	5,500	0.0	100	8,300	14
Panama I	2003	5,600	1,200	10,000	10,000	14
Columbia	2004	7,000	1,400	n/a	10,000	12
Panama II	2004	6,500	1,300	n/a	10,900	12
Jamaica	2004	6,500	1,300	n/a	16,000	20
Paraguay	2006	4,800	0.0	n/a	7,400	12
Guatemala	2006	15,000	2,000	n/a	24,400	15
Botswana	2006	7,000	0.0	n/a	8,300	10
Costa Rica I	2007	12,600	2,500	n/a	26,000	16
Peru II	2008	19,600	0.0	n/a	25,000	7
Indonesia I	2009	20,000	2,000	n/a	30,000	8
Brazil	2010	19,500	0.0	20,800	21,000	5
Costa Rica II	2010	19,600	3,900	21,000	27,000	15
Indonesia II	2011	19,800	3,960	28,500	28,500	7
Philippines II	2013	28,200	0	n/a	31,800	10
Indonesia III	2014	11,200	560	n/a	12,700	7
TOTAL		**310,200**	**22,520**	**n/a**	**339,400**	n/a

Sources: Email communications with Office of the Tropical Forest Conservation Act Secretariat, USAID 2004-2009, and the USAID, *Operation of the Enterprise of the Americas Facility and Tropical Forest Conservation Act, Annual Report to Congress* (Washington, DC, March 2004-2009). USAID, *Enterprise for the Americas Initiative and the Tropical Forest Conservation Act: 2014 Financials Report*, March 2015.

[12] In comparison, the U.S. government is a signatory on a Tropical Forest Agreement, which is used with debt-for-nature transactions that are not subsidized by an NGO.

[13] This agreement generally addresses the structure of the conservation fund, its administrative council, and the use of monies from the fund, among other things.

Notes: In the transaction with Peru in 2002, a total of $1.1 million was given by the Nature Conservancy, World Wildlife Fund, and Conservation International, and $5.5 million was given by the U.S. government. n/a = not available.

a. The Kingdom of Thailand signed a debt-reduction agreement in September 2001. The signing of the second required agreement, the Tropical Forest Agreement, never took place. The Thai government annulled the agreement on January 30, 2003, amidst false media reports that warned that the U.S. government would retain control over forests involved in the agreement.

b. The budget cost of the debt is the funding provided by the U.S. government to reduce the face value of the original debt.

c. In some debt-for-nature transactions, a third party is involved (generally a non-governmental organization) in the process and subsidizes a portion of the debt-reduction done by the United States. For example, NGOs such as the World Wildlife Fund, the Nature Conservancy, and Conservation International have subsidized these transactions.

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.[14] Political and macroeconomic criteria for eligibility are almost identical to those used for participation under the EAI.[15] Conservation funds (in local currency) from these transactions are deposited in a tropical forest fund for each country. The fund is overseen by an administrating body composed of one or more appointees chosen by the U.S. government and the government of the beneficiary country, and individuals who represent a broad range of environmental, academic, and scientific organizations in the beneficiary country (the majority of the board is represented by these individuals). This fund operates in the same manner as the Americas Fund: Local currency payments of interest accrued on restructured loans are deposited into a tropical forest fund and serve as the principal. Interest earned from this principal balance and the principal itself is usually given in the form of grants to fund tropical forest conservation projects. Eligible conservation projects include (1) the establishment, maintenance, and restoration of parks, protected reserves, and natural areas, and the plant and animal life within them; (2) training programs to increase the capacity of personnel to manage parks; (3) development and support for communities residing near or within tropical forests; (4) development of sustainable ecosystem and land management systems; and (5) research to identify the medicinal uses of tropical forest plants and their products.

The TFCA was reauthorized for appropriations in 2004, including $20 million for FY2005, $25 million for FY2006, and $30 million for FY2007. This law also authorizes funds to conduct audits and evaluations of debt-for-nature programs. A “TFCA Evaluation Sheet” has been created to evaluate the performance of TFCA country programs. The evaluation sheet establishes criteria for TFCA program categories and functions and is completed each year by the U.S. government representative on the local TFCA board or oversight committee. This law also authorizes the use of the principal of restructured loans for debt-for-nature transactions.

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[14] *Developing country* is defined as a “low-” or “middle-” income country as determined by the International Bank for Reconstruction and Development in its *World Development Report*. According to 2013 data from the World Bank, the cutoff for low-income countries was a per capita annual income of $1,045 or less. For middle-income countries, the range for per capita annual income is more than $1,045 but less than $12,746.

[15] Instead of having in place major investment reforms in conjunction with an Inter-American Development Bank (IADB) loan or making progress toward implementing an open investment regime, the country must have in place a bilateral investment treaty with the United States, investment sector loans with the IADB, World Bank-supported reforms, or other measures as appropriate (22 U.S.C. 2431c).

Issues for Congress

Rationale for and Criticism of Debt-for-Nature Initiatives

Advocates of debt-for-nature initiatives argue that reducing debt in developing countries will help create free-market systems (as part of the reforms required for eligibility), stimulate economic growth and trade liberalization, provide incentives for foreign investment, and help protect the environment. Converting hard currency debts to local currency debts, advocates argue, will lower debt burdens on developing countries and in the long run may reduce resource extraction at the expense of the environment. Critics of debt-for-nature initiatives argue that only a small percentage of debt is reduced, thereby minimizing the positive benefits of debt reduction in developing countries. For example, in some transactions under the TFCA, the interest paid for the debt is used for conservation projects, while the principle of the debt remains. Supporters point out that although the percentage of debt reduced by debt-for-nature transactions is small, the establishment of laws, programs, and funds dedicated to conservation that follows debt-for-nature initiatives in debtor countries is generally significant relative to what the country originally would have spent on conservation.[16] The relationship between debt reduction and lower resource extraction rates is controversial. Some analysts suggest that debt reduction has no direct relationship to lower extraction rates of minerals or timber in developing countries with foreign debt.[17]

Advocates of debt-for-nature initiatives note that the United States has a history of supporting debt reduction initiatives in developing countries and appropriating funds for environmental causes. For example, the Heavily Indebted Poor Countries (HIPC) initiative (22 U.S.C. §262p-6) aims to reduce debt in developing countries.[18] HIPC was created by international creditors, the World Bank, and IMF to reduce debt of poor countries that have demonstrated social and economic policy reforms that enable fluid export revenues and capital inflows.[19] Funds generated for the environment in developing countries arguably improve local environmental conditions, promote sustainable resource use, and help to preserve global biodiversity and ecosystem services. Critics argue that such benefits are limited in scope because conservation spending is unbalanced. The majority of conservation funds are often directed toward a few areas and specific projects that already feature work by organizations and researchers and do not address other areas that are equally rich in biodiversity.[20]

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[16] For example, Ecuador reduced its external debt of $8.3 billion by only $1 million from a debt-for-nature swap, yet doubled its budget for parks and reserves with money received from the resulting conservation fund.

[17] Dal Didia, "Debt-for-Nature Swaps, Market Imperfections, and Policy Failures as Determinants of Sustainable Development and Environmental Quality," *Journal of Economic Issues* (2001), pp. 477-486; and Esben Brandi-Hanson and Kaspar Svarrer, "Debt-for-Nature Swaps: One or the Other, or Both?" Royal Veterinarian and Agricultural University of Denmark, Department of Economics, 1998, p. 17.

[18] Eligibility requirements for participating in the Heavily Indebted Poor Countries (HIPC) program include that a country must receive only concessional financing from the World Bank and International Monetary Fund (IMF) (i.e., borrowing only from the World Bank's International Development Association [IDA] and from the IMF's Enhanced Structural Adjustment Facility [ESAF]), establish a track record of economic reforms under IMF- and World Bank-sponsored programs, and hold a debt burden that is unsustainable under existing (Naples terms) relief arrangements.

[19] See CRS Report RL30214, *Debt Reduction: Initiatives for the Most Heavily Indebted Poor Countries*, by (name redacted)

[20] John M. Shandra et al., "Do Commercial Debt-for-Nature Swaps Matter for Forests? A Cross National Test of World Polity Theory," *Sociological Forum*, vol. 26, no. 2 (June 2011), p. 387.

Advocates also suggest that debt-for-nature transactions that generate funds to support tropical forest conservation are especially appropriate to address climate change. Deforestation[21] is responsible for the largest share of carbon dioxide (CO_2) released to the atmosphere due to land use changes, approximately 20% of total anthropogenic greenhouse gas (GHG) emissions annually.[22] Much of the deforestation responsible for CO_2 releases occurs in tropical regions, specifically in developing countries such as Brazil, Peru, Indonesia, and the Democratic Republic of the Congo. Some of these tropical countries with high levels of total debt owed to the United States also have some of the largest areas of tropical forest cover. For example, Brazil and Peru have debts to the United States totaling over $1 billion each, and have two of the largest areas of tropical forest cover in the world.[23] Other countries, such as the Democratic Republic of Congo and Sudan, also fit this pattern; however, these countries may be ineligible for debt-for-nature transactions under the TFCA due to political and economic eligibility requirements.[24]

Those who oppose debt-for-nature transactions often argue that they are not adequately enforced by debtor countries, generate insufficient funds to improve environmental problems, and may infringe on national sovereignty.[25] Three-party debt transactions have historically had weak enforcement mechanisms; however, bilateral debt transactions such as those conducted under the EAI generally include safeguards and default provisions to protect the U.S. government from losing funds. National sovereignty became an issue with the first debt-for-nature swap in Bolivia when a conservation organization was reported to have obtained title to forested lands. There was a public outcry and ensuing political crisis when the Bolivian people thought a large part of their country had been given to a foreign organization. Consequently, conservation organizations involved in recent three-party transactions have generally refrained from directly buying land in debtor countries with conservation funds earned from debt-for-nature transactions.

Decline of Debt-for-Nature Transactions

The number of debt-for-nature transactions has declined in recent years, perhaps due to accounting changes that require greater appropriations to fund debt-for-nature transactions with official (public) debt, and a higher price of commercial debt on the secondary market (see **Figure 3**). Before 1991, no appropriations were required for debt cancellations, and the United States cancelled between $11 billion and $12 billion in debt between 1988 and 1991. This changed with the Federal Credit Reform Act of 1990 (2 U.S.C. 661a et seq.). This law requires that the net present value (NPV) of debts owed to the United States by foreign countries be used to calculate the cost of debt restructuring, buybacks, swaps, and cancellations to the U.S. government. The NPV of the loan is calculated often giving consideration to projected default losses, fees, and

[21] Deforestation is the conversion of forests to pasture, cropland, urban areas, or other landscapes that have few or no trees. Afforestation is planting trees on lands that have not grown trees in recent years, such as abandoned cropland.

[22] Intergovernmental Panel on Climate Change, "Working Group I Contribution to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change," *Climate Change 2007: The Physical Science Basis* (2007), at http://ipcc-wg1.ucar.edu/wg1/wg1-report.html. (Hereinafter referred to as 2007 IPCC WG I Report.)

[23] U.S. Department of the Treasury and Office of Management and Budget, "United States Government Foreign Credit Exposure As of December 31st 1999," 2001; Food and Agriculture Organization of the United Nations, "State of the World's Forests 2001," 2001.

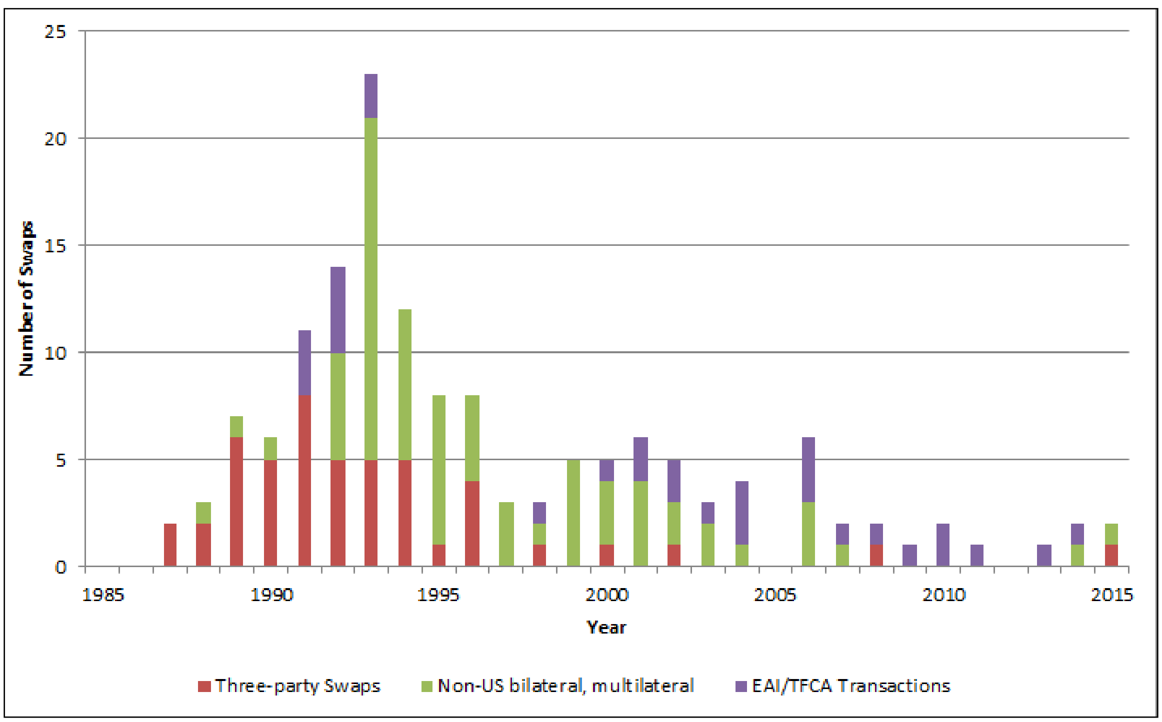
[24] Participation in three-party debt-for-nature swaps through USAID is not subject to the same economic and political criteria required for participation in TFCA and EAI debt-for-nature transactions. An eligible country must be committed to, plan for, and have a government or local NGO responsible for the long-term viability of the programs under the swap agreement.

[25] R. T. Deacon and P. Murphy, "The Structure of an Environmental Transaction: The Debt-for-Nature Swap," *Land Economics* (1997), pp. 1-24.

interest subsidies. Funds appropriated by Congress for conducting debt-for-nature transactions cover the cost of loan modifications, which could include a face-value reduction in the amount of eligible debt owed to the United States. TFCA has not received appropriations since FY2014, and none are requested for FY2017.

A decline in three-party commercial debt-for-nature transactions may also be due to the conclusion of Brady Plan operations by Latin American countries. The Brady Plan allowed for partial debt forgiveness with a restructuring of the remaining debt into bonds that could be traded on the securities markets. When this program was concluded, the price of debt on the secondary market increased and financing leverage decreased, making it difficult and less attractive for environmental organizations to acquire debt for resale.[26] Further, debt relief for developing countries is available through other programs that allow for relatively greater amounts of debt to be cancelled (e.g., HIPC). These programs may be more desirable to developing countries with debt than debt-for-nature initiatives under the EAI or TFCA. Under the TFCA, there was an 18-month period from 2004 to 2006 when no transactions were made, largely due to the length of time needed to negotiate and create debt-restructuring agreements. Lastly, the political and economic requirements needed to be eligible for debt-for-nature transactions make it difficult for several countries to participate in EAI or TFCA programs.

Figure 3. Total Debt-for-Nature Transactions 1987-2015



Source: Congressional Research Service.

Note: Some debt transactions during this time period may not be represented in this figure due to limited data available from international sources and organizations.

[26] The World Bank, "World Debt Tables, 1996," 1996.

Effectiveness of Debt-for-Nature Transactions

Few studies have analyzed the effectiveness of debt-for-nature transactions. Because most of the transactions are relatively new, it would be difficult to comprehensively analyze their effectiveness in preventing the destruction of tropical forests. A recent study on deforestation in poor countries found that poor nations that have implemented debt-for-nature transactions and have high levels of conservation funds tend to have lower rates of deforestation than countries that do not.[27] Nevertheless, many conservation organizations support the framework of the TFCA and suggest that the TFCA should serve as a model for conserving other ecosystems, such as coral reefs and grasslands.

Appropriations

Appropriations for debt reduction activities authorized by the EAI totaled $90 million; $40 million was appropriated for P.L. 480 debt reduction for FY1993 (P.L. 102-341) and $50 million was appropriated for other debt restructuring under EAI in FY1993 (P.L. 102-391). For debt reduction activities under TFCA, appropriations have totaled approximately $235.8 million from FY2000 to FY2014 (see **Table 5**). Authorization for appropriations under TFCA expired in FY2008, and Congress has not appropriated funding for the program since FY2013.

Table 5. Appropriations for Debt-for-Nature Transactions Under TFCA

(in millions of dollars)

Fiscal Year	Appropriated Amount	Annual Obligation
2000	$13.0	$7.0
2001	13.0	13.2
2002	Up to 25.0 (11.0 was given for the TFCA)[a]	11.0
2003	Up to 40.0 (20.0 was given for the TFCA)	5.6
2004	19.8	20.0
2005	20.0	0.0
2006	20.0	20.0
2007	20.0	19.6
2008	20.0	19.6
2009	20.0	20.0
2010	20.0	39.1
2011	16.4	19.8
2012	12.0	0.0
2013	11.4	28.3
2014	0.0	11.2

[27] John M. Shandra et al., "Do Commercial Debt-for-Nature Swaps Matter for Forests? A Cross National Test of World Polity Theory," *Sociological Forum*, vol. 26, no. 2 (June 2011), pp. 401-402.

Fiscal Year	Appropriated Amount	Annual Obligation
2015	0.0	0.0
2016	0.0	0.0

Sources: Tropical Forest Conservation Act Secretariat, *Enterprise for the Americas Initiative and Tropical Forest Conservation Act, 2014 Report*, USAID, 2015, and federal appropriations laws.

a. This figure consists of $5 million in direct funds and $6 million in funds transferred from unobligated balances.

Future Directions

Bilateral debt-for-nature initiatives implemented by the U.S. government were supported through appropriations under programs such as the EAI and TFCA. Recently, appropriations for conducting debt-for-nature transactions under these programs have stopped. It is unclear why there is less interest in conducting debt-for-nature transactions. Some possibilities could include the following:

- Eligible debt to conduct these transactions has decreased, making these transactions either insignificant or not allowed for some debtor countries.
- The amount involved in the transactions is too small for some eligible countries to show interest in participating.
- There is a lack of appropriations to support debt-for-nature transactions.
- The focus on tropical forests (i.e., through TFCA) might be too narrow for many eligible countries.

Some Members of Congress contend that transactions under TFCA should continue because the program is included in strategies to address global climate change.[28] Tropical forests make up the largest proportion of carbon stored in terrestrial land masses and are thought to be a carbon sink.[29] Despite uncertainties on the part of some, it is generally thought that maintaining existing tropical forests will store carbon and that preventing deforestation will reduce the release of stored carbon into the atmosphere.[30] The most recent debt-for-nature swap with Indonesia under the TFCA in 2014, for example, has been billed as a cooperative effort to deal with climate change.[31]However, no quantitative analyses have examined the amount of stored-carbon emissions reduced by TFCA efforts.

[28] Senator Rob Portman, "Portman Renews Efforts to Promote Conservation and Reduce Greenhouse Gas Emissions," press release, February 26, 2015, at http://www.portman.senate.gov/public/index.cfm/press-releases?ID=4E89FFE6-B315-460E-B3A3-6E5844619F9E.

[29] For more information, see CRS Report R41144, *Deforestation and Climate Change*, by (name redacted) .

[30] T. K. Rudel, *Sequestering Carbon in Tropical Forests: Experiments, Policy Implications, and Climate Change*, Society and Natural Resources, vol. 14 (2001), pp. 525-531.

[31] U.S. Embassy in Indonesia, "U.S. and Indonesia Award Grants to Promote Forest Conservation and Combat Climate Change," press release, April 29, 2014, at https://id.usembassy.gov/u-s-and-indonesia-award-grants-to-promote-forest-conservation-and-combat-climate-change-2/.

Appendix. List of Related Laws and Appropriations That Support Debt-for-Nature Initiatives

- **Continuing Appropriations Act for 1988 (**P.L. 100-202**; Section 537(C)(1-3)).** Directs Secretary of the Treasury to analyze initiatives that would enable developing countries to repay portions of their debt obligations through investments in conservation activities.
- **International Development and Finance Act of 1989 (**P.L. 101-240**; Title VII, Part A, Section 711) (22 U.S.C. 2282 - 2286).** Authorizes USAID to provide assistance to nongovernmental organizations to purchase debt of foreign countries as part of a debt-for-nature agreement (i.e., three-party swap). Authorizes USAID to conduct a pilot program for debt-for-nature swaps with eligible sub-Saharan African countries.
- **Support for East European Democracy (SEED) Act of 1989 (**P.L. 101-179**; Title I, Section 104) (22 U.S.C. 5414).** Authorizes the President to undertake the discounted sale, to private purchasers, of U.S. government debt obligations from eligible Eastern European countries.
- **FY1990 Foreign Operations Appropriations Act (**P.L. 101-167**; Title V, Section 533(e)) (22 U.S.C. 262p-4i - 262p-4j).** Directs the Secretary of the Treasury to (1) support sustainable development and conservation projects when negotiating reduction of commercial debt and assisting with reduction of official (public) debt obligations, (2) encourage the World Bank to assist countries in reducing or restructuring private debt through environmental project and policy-based loans, and (3) encourage multilateral development banks to support lending portfolios that will allow debtor countries to restructure debt that may offer financial resources for conservation.
- **Enterprise for the Americas Initiative** (Title XV, Section 1512 of the Food, Agriculture Conservation and Trade Act of 1990) (P.L. 101-624; 104 Stat. 3658) (7 U.S.C. 1738b). Amends the Agriculture Development and Trade Act of 1954 to allow the President to reduce the amount of P.L. 480 sales credit debt owed to the United States by Latin American and Caribbean countries.
- **Export Enhancement Act of 1992 (**P.L. 102-429**; Title I, Section 108) (12 U.S.C. 635i-6).** Authorizes the sale, reduction, cancellation, and buyback of outstanding Export-Import Bank (Exim) loans for EAI purposes.
- **Jobs Through Exports Act of 1992** (debt forgiveness authority under EAI) (P.L. 102-549; Title VI, Section 704) (22 U.S.C. 2430 and 22 U.S.C. 2421). Authorizes the sale, reduction, cancellation, and country buyback (through right of first refusal) of eligible Commodity Credit Corporation (CCC) debt. Also authorizes the reduction of foreign assistance (USAID) debt.
- **Enterprise for the Americas Initiative Act of 1992 (**P.L. 102-532**) (7 U.S.C. 1738m, p-r, etc.).** Establishes guidelines for debt-for-nature swaps for Latin American and Caribbean countries.
- **Agriculture Appropriations for FY1993 (**P.L. 102-341**).** Provided $40 million for P.L. 480 debt reduction under EAI.
- **Foreign Operations Appropriations for FY1993 (**P.L. 102-391**).** Provided $50 million for debt restructuring under EAI.

- **Foreign Operations Appropriations for FY1995 (**P.L. 103-306**; Title II, Section 534).** Authorizes nongovernmental organizations associated with the Agency for International Development to place funds from economic assistance provided by USAID in interest-bearing accounts. Earned interest may be used for the purpose of the grants given.
- **Foreign Operations Appropriations for FY1996 (**P.L. 104-107**; Title V, Section 571).** Provides authority to perform debt buybacks/swaps with eligible loans made before January 1, 1995. For buybacks, the lesser of either 40% of the price paid or the difference between price paid and face value must be used to support conservation, child development and survival, or community development programs (Title V, Section 574).
- **Tropical Forest Conservation Act of 1998 (**P.L. 105-214**) (22 U.S.C. 2431).** Amends the Foreign Assistance Act of 1961 to facilitate the protection of tropical forests through debt restructuring, buybacks, and swaps in eligible developing countries with tropical forests.
- **Reauthorization of the Tropical Forest Conservation Act (**P.L. 107-26**).** Authorizes the appropriation of $50 million, $75 million, and $100 million for FY2002, FY2003, and FY2004. Reduces the magnitude of investment reforms that must be in place for eligible countries.
- **Reauthorization of Appropriations under the Tropical Forest Conservation Act (**P.L. 108-323**).** Authorizes the appropriation of $20 million, $25 million, and $30 million for FY2005, FY2006, and FY2007, respectively. Includes authorization for evaluating programs and allows for the principal on debt agreements to be treated by the debt-for-nature transaction.

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