

**TURNING TO A TRUSTED FRIEND  
USING DEBT EXCHANGES FOR ENVIRONMENTAL  
AND DEVELOPMENT PURPOSES**

**Steven Freeland\***

*[W]hy not use the debt crisis...to help solve environmental problems? ...Stimulating conservation while ameliorating debt would encourage progress on both fronts...<sup>1</sup>*

**I. INTRODUCTION**

On 13 July 2001, the United States announced that, as part of a package of initiatives designed to address climate change and "promote cooperation in the Western Hemisphere and beyond" on environmental matters, it had signed a US\$14 million 'Debt-for-Forest' swap with El Salvador.<sup>2</sup> The arrangement, structured under the 1998 Tropical Forest Conservation Act,<sup>3</sup> provides that every dollar of debt relief would be exchanged for two dollars of local currency funding for forest conservation. The United States also hoped to reach similar agreements with several other countries.

These proposals carry significant political undertones since they are partly intended to diffuse international and domestic criticism of President Bush's environment policies following the rejection of the Kyoto Protocol to the United Nations Framework Convention on Climate Change in March 2001.<sup>4</sup> Nonetheless, they show the potential

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\* B Com, LLB, LLM; Lecturer, University of Western Sydney.

<sup>1</sup> Lovejoy, "Aid debtor nations' ecology", New York Times, 4 October 1984 at A-31 column 1.

<sup>2</sup> The White House, Office of the Press Secretary, "Action on climate change initiatives", Press Release, 13 July 2001 at </www.whitehouse.gov> (visited 25 July 2001).

<sup>3</sup> Pub L No 105-214, 22 USC s 2431; refer Section VI below.

<sup>4</sup> 11 December 1997, 37 International Legal Materials 22. In March 2001, President Bush announced that the United States, a party to the United Nations Framework Convention on Climate Change (UNFCCC), would not support the Kyoto Protocol's implementation. He deemed the Protocol to be based on 'incomplete' science, and hence 'flawed', 'costly' and 'unfair' in that it did not bind major developing countries such as China and India. The United States has maintained this stance and was not part of the Ministerial Agreements reached at the 6<sup>th</sup> Conference of the Parties to the UNFCCC (COP6 Part II) held in Bonn shortly after announcing the Agreement with El Salvador nor of the Marrakesh Accords and the Marrakesh Declaration concluded

benefits of applying a highly flexible financial technique – the debt exchange mechanism – to promote environmental goals.

The debt exchange has been used in various ways over the past 20 years.<sup>5</sup> It began with rather modest aims but when structured to take account of local conditions is potentially quite effective in advancing both economic growth and sustainability of natural resources. The debt exchange has, therefore, subsequently been applied – albeit thus far only on a relatively small scale – to significant social, cultural and developmental programs in less developed countries (LDCs).

This article describes the evolutionary process of the debt exchange from the first debt-for-nature (DFN) swap in 1987 to the point where it might now be utilised to address the complexity of problems associated with the unsustainable levels of LDC debt. The development of the mechanism was possible following the establishment of a secondary market for LDC debt, which was spawned by the 1980s Latin American debt crisis. This article describes that development and highlights the basic components of a DFN transaction.

The several case studies discussed below illustrate how the debt exchange has evolved from 'first generation' conservation transactions to wider 'second generation' mechanisms incorporating developed country government involvement. These later transactions have made it possible for larger amounts of debt to be utilised in respect of a broader range of environmental and development purposes. In addition, other initiatives by the United States and major multilateral development banks (MDBs) are referred to. These have enabled the evolutionary process to continue, and include the legislation under which the latest debt exchanges announced by President Bush have been established.

This past experience suggests that the debt exchange mechanism might possibly also be used to embrace questions of even broader concern, such as the transfer and distribution of technology designed to promote

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at COP7 held in Marrakesh in October-November 2001.

<sup>5</sup> The concept was first developed as a debt-for-equity exchange but has since evolved to encompass transactions designed to contribute to conservation, environment protection and development programs in less developed countries. This article is primarily concerned with these latter forms of 'non-equity' transactions referred to as a 'debt exchange'.

sustainable development in LDCs. A primary international objective since the 1992 Earth Summit<sup>6</sup> is the goal of sustainable development that has been and forms the cornerstone of the following year's World Summit on Sustainable Development.<sup>7</sup>

The potential for a country to achieve sustainable development is inextricably linked to the level of its external debt. The level of LDC debts has become a highly politicised international issue. Increasingly strident public activism has drawn attention to growing economic disparities between developed countries and LDCs, as evidenced by the violent 'anti-globalisation' protests at the World Trade Organisation meeting in Seattle in December 1999 and the recent G-8 meeting in Genoa. Levels of foreign debt themselves impact on the LDC's environment and capacity for development, creating concerns that the industrialised countries can in good conscience no longer ignore.

While some (relatively ineffective) steps have been taken to address LDC debt levels and related issues of environmental degradation and non-sustainable development, it is clear that much more is required. There remain many structural challenges, as well as the spectre of *Realpolitik*, associated with questions of LDC development and external debt. In this regard, however, the debt exchange mechanism has the potential to play a role. It does seem possible for a new and possibly much more significant 'third' generation of debt exchange transactions to be developed, which could perhaps more effectively aid the achievement of sustainable development by LDCs.

While it is not suggested that the adaptation of the mechanism alone could solve the very significant systemic problems that exist, the use of the mechanism in appropriate circumstances certainly goes some way to addressing these issues. It may well be that its full potential is

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<sup>6</sup> United Nations Conference on Environment and Development, Rio de Janeiro, 3-14 June 1992 (UNCED). It was held to coincide with the 20<sup>th</sup> anniversary of the first international United Nations Conference on the Human Environment held in 1972 (the Stockholm Conference).

<sup>7</sup> The World Summit on Sustainable Development, also known as 'Rio + 10', will be held from 2-11 September 2002 in Johannesburg, South Africa. It will bring together representatives from governments, United Nations agencies, multilateral financial institutions and various non-governmental organisations (NGOs) to assess developments in relation to sustainable development since UNCED.

perhaps as yet unfulfilled in this regard. Indeed, the financing of large-scale projects under the Clean Development Mechanism (CDM) proposed under the Kyoto Protocol (or any similar regime) could represent a real opportunity to expand the debt exchange mechanism in this way.<sup>8</sup> If this were possible, it could encourage more significant private sector and developing country participation in the Protocol, which would prove crucial to the success (or failure) of that agreement.

## II. THE EMERGENCE OF THE DEBT EXCHANGE 1982–1987

In August 1982, the Finance Minister of Mexico announced that his country could not meet its immediate financial obligations.<sup>9</sup> At the time, it required approximately US\$80 billion to satisfy its creditors.<sup>10</sup> He declared that without new loans Mexico would be forced to suspend all debt repayments for three months and negotiate the rescheduling of repayments on its existing foreign debt.<sup>11</sup> Shortly afterwards, Brazil announced that it required an additional US\$4 billion to avoid defaulting on its debt repayments.<sup>12</sup> Other highly indebted countries, including Argentina, Costa Rica and Peru, soon made similar announcements.<sup>13</sup>

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<sup>8</sup> The CDM is established under Article 12 of the Kyoto Protocol. It provides for developed countries to fund greenhouse gas (GHG) emission reduction projects in developing countries and use the resulting carbon 'credits' – Certified Emissions Reductions (CERs) – to offset part of their national GHG emission reduction commitments under the Kyoto Protocol. One of the goals of the CDM is to help developing countries achieve sustainable development.

<sup>9</sup> Cohen, "Give me equity or give me debt: avoiding a Latin debt revolution" (1988) 10:1 *University of Pennsylvania Journal of International Business and Law* 89, 94.

<sup>10</sup> Biggs, "Nibbling away at the debt crisis: debt-for-nature swaps" (1991) 10 *Annual Review of Banking Law* 429, 435.

<sup>11</sup> Cohen, "Give me equity or give me debt: avoiding a Latin debt revolution" (1988) 10:1 *University of Pennsylvania Journal of International Business and Law* 89, 95. In an ironic turnaround, Mexico was in a dispute 18 years later with Citibank, one of its major creditors, after having prepaid a US\$2.5 billion loan early. The bank claimed that this action deprived it of hundreds of millions of dollars in interest income that would otherwise have been payable over the remaining six years of the original loan period: Fineren, "Mexico's debt situation takes a new twist," *New York Times*, 27 June 2000 at <[www.nytimes.com](http://www.nytimes.com)> (visited 28 June 2000).

<sup>12</sup> Biggs, "Nibbling away at the debt crisis: debt-for-nature swaps" (1991) 10 *Annual Review of Banking Law* 429, 436.

<sup>13</sup> Webb, "Debt for nature swaps: The past, the present and some possibilities for the future" (1994) 11 *Environmental and Planning Law Journal* 222, 224.

The Latin American 'debt crisis' was born.<sup>14</sup> Misled by the combination of high domestic inflation rates and a weak United States dollar,<sup>15</sup> these countries had undertaken substantial industrialisation programs, often involving largely unproductive 'development projects',<sup>16</sup> from the early 1970s. These were largely financed by what were considered as 'cheap' dollar denominated loans rather than through direct foreign investment.<sup>17</sup> A series of events – including rapidly increasing oil prices, poor lending and borrowing practices, rising interest rates and an increasingly stronger dollar – now meant that they were faced with severe economic and financial burdens and were unable to service their debt.<sup>18</sup>

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<sup>14</sup> Mexico's failure in 1976 to meet its debt obligations was not without precedent. However, the circumstances of the debt crisis sparked by Mexico's announcement in 1982 threatened to bring with it far greater economic repercussions than in previous events of debt default. The reason was '[n]o prior economic crisis [ie before the 1982 debt crisis] has involved such a large amount of debt owed to so many creditors in so many countries': Cohen, "Give me equity or give me debt: avoiding a Latin debt revolution" (1988) 10:1 *University of Pennsylvania Journal of International Business and Law* 89, 95. Similarly, it is misleading to think that the debt crisis that crystallised in 1982 has been the most recent episode of financial instability in Latin American countries (and other LDCs). For further discussion see Rohter, "Argentina's economy casts a shadow", *New York Times*, 18 December 2000 at <www.nytimes.com> (visited 24 December 2000). For further discussion on how some Latin American countries have slowly regained financial stability and are presently achieving satisfactory rates of economic growth while others remain burdened by unsustainable high levels of external debt, see Krugman, "The shadow of debt", *New York Times*, 22 November 2000 at <www.nytimes.com> (visited 23 November 2000); Kahn, "IMF ready for Brazil and Argentina rescues", *New York Times*, 4 August 2001 at <www.nytimes.com> (visited 6 August 2001).

<sup>15</sup> Minzi, "The Pied Piper of debt-for-nature swaps" (1993) 14:1 *University of Pennsylvania Journal of International Business and Law* 37, 40-48.

<sup>16</sup> Greener, "Debt-for-nature swaps in Latin American countries: The enforcement dilemma" (1991) 7 *Connecticut Journal of International Law* 123, 139.

<sup>17</sup> Between 1973 and 1983, Latin American (including Mexican) external debt increased from approximately US\$48 billion to approximately US\$350 billion, representing 58% of regional Gross National Product (GNP): Cole, "Debt-equity conversions, debt-for-nature swaps and the continuing world debt crisis" (1992) 30 *Columbia Journal of Transnational Law* 57, 60.

<sup>18</sup> By 1985, the foreign debt of Argentina, Brazil and Mexico amounted to approximately 50%, 23% and 42% of their respective GNPs. Their debt servicing obligations in that year represented 5.0%, 2.8% and 6.8% respectively of GNP: refer *Statistical Abstract of the United States 1987* at 816 and 841, reproduced in part in Juergensmeyer and anor, "Debt For nature swaps: A modest but meaningful response to two international crises" (1990) 5 *Florida International Law Journal* 193, 196.

Within one year of Mexico's announcement, 27 countries commenced the process of debt rescheduling.<sup>19</sup> From 1982-1991, over 40 LDCs – many from Latin America<sup>20</sup> – defaulted on their sovereign debt obligations.<sup>21</sup> The situation reached a peak in 1987 when Brazil declared a moratorium on the repayment of interest obligations. By this time, 17 developing world debtors were US\$6.3 billion in arrears,<sup>22</sup> and by 1989 they were facing the burdens of servicing foreign debt totalling US\$1.3 trillion.<sup>23</sup> International (mainly United States) commercial banks had assumed that borrowing countries could not legally go 'bankrupt'<sup>24</sup> and engaged in a 'Latin lending frenzy' during the 1970s.<sup>25</sup> These institutions themselves became faced with the real possibility of financial ruin, not only because of the precarious

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<sup>19</sup> Buckley, "The transformative potential of a secondary market: Emerging markets debt trading from 1983 to 1989" (1998) 21:4 *Fordham International Law Journal* 1152.

<sup>20</sup> Countries in several other parts of the world, such as Eastern Europe, also suffered a similar fate. For example, by 1981 Poland was unable to fully meet its international debt servicing requirements. Yet, following a period of debt rescheduling, the situation became even worse. In 1985, the country allocated US\$2.5 billion to service debt of US\$29.3 billion; in the following year external debt had increased to US\$33.5 billion but the government could only repay US\$1.96 billion. Cole, "Debt-equity conversions, debt-for-nature swaps and the continuing world debt crisis" (1992) 30 *Columbia Journal of Transnational Law* 57, 61-62. Refer also Section V below for a description of various debt exchanges that were implemented in Poland shortly after the introduction of a non-communist government in 1989.

<sup>21</sup> Wilson, "The United States Agency for International Development as catalyst for debt for nature swaps" (1991) 10 *UCLA Pacific Basin Law Journal* 260, 263.

<sup>22</sup> Sher, "Can lawyers save the rainforest? Enforcing the second generation of debt-for-nature swaps" (1993) 17 *Harvard Environmental Law Review* 151, 156.

<sup>23</sup> Knupfer, "Debt-for-Nature Swaps: Innovation or intrusion?" (1991) 4:2 *New York International Law Review* 86 note 1. This was approximately US\$400 billion more than at the onset of the Latin debt crisis in 1982. Burton, "Debt for development: A new opportunity for nonprofits, commercial banks, and developing states" (1990) 31 *Harvard International Law Journal* 233, 235.

<sup>24</sup> Minzi, "The Pied Piper of debt-for-nature swaps" (1993) 14:1 *University of Pennsylvania Journal of International Business and Law* 37, 41.

<sup>25</sup> Buckley, "Debt Exchanges Revisited: Lessons From Latin America for Eastern Europe" (1998) 18:3 *Northwestern Journal of International Law and Business* 655, 655. After the two 'oil shocks' of the 1970s, very large amounts of 'petrodollars' were deposited by oil producing nations into accounts held with the major commercial banks. These banks sought to earn additional fees by lending these funds to LDCs at relatively high interest rates. Post, "The debt-for-nature swap: A long-term investment for the economic stability of less developed countries" (1990) 24:4 *The International Lawyer* 1071, 1073.

financial position of debtor countries, but also their own lending practices – they had frequently provided 'no strings attached'<sup>26</sup> loans without proper consideration as to how the funds would be utilised.<sup>27</sup>

Initially, the major commercial lending banks and the United States Administration determined that there was no real option other than to stop new lending and reschedule existing debts,<sup>28</sup> and responded with 'stopgap measures'.<sup>29</sup> However, these provided no greater solvency for LDCs.<sup>30</sup> Indeed, in many cases this strategy simply exacerbated the situation since interest suspended under these rescheduling programs

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<sup>26</sup> *Ibid.*

<sup>27</sup> It was estimated that at the time that the debt crisis crystallised, loans to just three countries (Argentina, Mexico and Brazil) accounted for about 80% of the entire capital of the United States banking system: Biggs, "Nibbling away at the debt crisis: debt-for-nature swaps" (1991) 10 *Annual Review of Banking Law* 429, 437. Clearly these commercial banks were vulnerable to a collapse in the financial stability of these borrowing countries. It is interesting to note, however, that although the Latin debt crisis raised the real possibility of failure for some of these creditor banks, they have more recently (largely) fared relatively well and the crisis has abated for them. This has not however been the case for many sovereign LDC debtors: Cole, "Debt-equity conversions, debt-for-nature swaps and the continuing world debt crisis" (1992) 30 *Columbia Journal of Transnational Law* 57, 57-58.

<sup>28</sup> Of course the banks at this stage may simply have made significant provisions regarding these debts – in effect to 'write off' a large portion of the loan portfolio. However, there were fears that this action would 'contaminate' a bank's entire loan portfolio for that particular LDC (or even for its entire LDC loan assets), adding to the risks regarding a bank's own viability. In any event, in the years immediately following the onset of the Latin debt crisis, such actions would have been unacceptable to the banks' shareholders, the United States Administration and the general financial community. It was not until 19 May 1987 that Citicorp announced that it was increasing its loan loss reserves (approximating its LDC debts) to about US\$3 billion: Asiedu-Akrofi, "A comparative analysis of debt equity swap programs in five major debtor countries" (1989) 12:3 *Hastings International and Comparative Law Review* 537, 539. Whilst Citicorp's provision was for only 25% of its exposure, it was the first such action by a major United States money centre bank. This was soon followed by similar action by other United States and United Kingdom commercial banks engaged in sovereign lending. These actions contributed significantly to the impetus and liquidity of the international secondary debt market: Buckley, "A capital markets odyssey: an exploration of the secondary market in emerging markets debt", unpublished paper dated 2000 at 4-5 (held on file by the writer).

<sup>29</sup> Cohen, "Give me equity or give me debt: Avoiding a Latin debt revolution" (1988) 10:1 *University of Pennsylvania Journal of International Business and Law* 89, 96.

<sup>30</sup> Cole, "Debt-equity conversions, debt-for-nature swaps and the continuing world debt crisis" (1992) 30 *Columbia Journal of Transnational Law* 57, 63.

continued to accumulate at a faster rate than export growth in LDCs, creating a self-perpetuating 'black hole'. The growth in debt levels (plus accumulated interest) precipitated further rescheduling even as the banks, by withholding new loans, were cutting off the ability of LDCs to service debts.<sup>31</sup>

It was soon apparent that other financial mechanisms were necessary in order to avoid the possible collapse of the international financial system. The International Monetary Fund (IMF) and World Bank instituted 'stabilizing loans' conditional upon the implementation of austerity measures. These also had negative effects on LDC economies. The United States Administration then instigated various broad measures – the 'Baker Plan'<sup>32</sup> in 1985 and, after that failed, the 'Brady Plan'.<sup>33</sup> The Brady Plan brought a measure of stability to the international financial system<sup>34</sup> but many LDC countries still remained largely unable to properly service their debts.<sup>35</sup> Systemic weaknesses that had led to the debt crisis had not been properly addressed.

During this process, financial institutions realised that some LDCs might never be able to service their debts, let alone repay the principal. Creditor banks therefore sought ways to minimise their losses. Many began to swap between themselves parts of their Latin American loan portfolios. Over time, a formalised international secondary market in

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<sup>31</sup> Post, "The debt-for-nature swap: A long-term investment for the economic stability of less developed countries" (1990) 24:4 *The International Lawyer* 1071, 1074-1075.

<sup>32</sup> James Baker was the United States Secretary of the Treasury who announced this program: Knupfer, "Debt-for-nature swaps: Innovation or intrusion?" (1991) 4:2 *New York International Law Review* 86, 86. This program, titled 'Program for Sustained Growth', involved debt rescheduling through the provision of a further US\$20 billion in new loans. However, by 1987 it had largely stalled, due partly to the continuing net outflow of resources from LDCs.

<sup>33</sup> Nicholas Brady was the United States Secretary of the Treasury who proposed this program in March 1989. This program incorporated elements of debt relief and the conversion of loans into collateralised bonds, together with the IMF/World Bank austerity measures: Buckley, "The facilitation of the Brady Plan: Emerging markets debt trading from 1989 to 1993" (1998) 21:5 *Fordham International Law Journal* 1802, 1804.

<sup>34</sup> *Ibid* 1887.

<sup>35</sup> For a comprehensive review of the attempts by the United States Administration to address the concerns that arose following the onset of the debt crisis, as well as a discussion of both the Baker and Brady plans, see *ibid* 1802-1889.



LDC debt was established<sup>36</sup> to give banks no longer wishing to lend to LDCs a way out of a 'restructuring bind'.<sup>37</sup> Debt could be purchased at a 'discount' to face value, the extent of which reflected the market's perception of the risks associated with the particular sovereign debtor and its expectation as to the likelihood of (any) repayment. The gradual development of a liquid international LDC debt market encouraged the creation of innovative financing mechanisms.<sup>38</sup> These would allow banks to expunge problem assets from their books in a manner acceptable to shareholders and to maximise – or at least crystallise – any possible financial returns from their LDC loan portfolios.

The most significant of these measures were the various debt buy-back programs instituted by a number of LDC countries. These were a principal source of debt relief for some Latin American countries.<sup>39</sup> One large sovereign debtor reputedly purchased US\$17 billion of its own debt in the mid-1990s, "partly with funds saved from the interest payments it had been refusing to make",<sup>40</sup> giving rise to 'moral hazard' concerns among creditor banks in relation to debt relief programs.<sup>41</sup>

Creditor banks also introduced various forms of debt exchange to address the ramifications of the debt crisis. These involved the

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<sup>36</sup> For a comprehensive description of the establishment of the secondary market in 'emerging markets' debt, see Buckley, "The transformative potential of a secondary market: emerging markets debt trading from 1983 to 1989" (1998) 21:4 *Fordham International Law Journal* 1152.

<sup>37</sup> Asiedu-Akrofi, "A comparative analysis of debt equity swap programs in five major debtor countries" (1989) 12:3 *Hastings International and Comparative Law Review* 537, 540.

<sup>38</sup> The secondary market was centred in New York and grew rapidly. In 1996, over US\$5.3 trillion face value of debt was bought and sold in this market, much of it due to conversion of loans into Brady bonds. Buckley, "Reschedulings as the groundwork for secondary markets in sovereign debt" (1998) 26:2 *Denver Journal of International Law and Policy* 299, 299 note 2.

<sup>39</sup> Buckley, "Debt exchanges revisited: Lessons from Latin America for Eastern Europe" (1998) 18:3 *Northwestern Journal of International Law and Business* 655, 681. The Economist had estimated that in 1989 alone, LDCs purchased \$30 billion of their own debt informally in the international secondary debt market: Buckley, "The facilitation of the Brady Plan: emerging markets debt trading from 1989 to 1993" (1998) 21:5 *Fordham International Law Journal* 1802, 1825.

<sup>40</sup> *Ibid* 1825-1826. It is suggested that this was either Argentina or Brazil, probably the latter.

<sup>41</sup> See note 258 below.

'conversion' of debt into another form of asset or investment.<sup>42</sup> The first debt exchange mechanism implemented on a large scale was the debt-for-equity transaction (DFE), which evolved as a specialised form of counter-trade.<sup>43</sup> Government or private external debt was converted into an equity interest in a private or public debtor country organisation or a state owned asset to be privatised by the sovereign borrower. The DFE transaction was envisaged as a way of facilitating foreign investment and stimulating economic growth of LDCs, whilst also retiring substantial debt.<sup>44</sup> Yet these transactions raised many questions as to the extent of 'real' benefits they gave to sovereign debtors.<sup>45</sup> In many cases they were not structured with the real needs of LDCs in mind. Furthermore, LDCs raised (in many cases justifiable) concerns that, by engaging in DFE transactions, they were selling off their most attractive assets simply to satisfy the demands of international commercial banks.<sup>46</sup> This heightened fears of foreign control over LDC economies.<sup>47</sup> Over time, use of the DFE has declined, though it is still implemented in some circumstances.<sup>48</sup>

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<sup>42</sup> Other debt reduction techniques included exit bonds (where creditor banks agree to accept lower interest government guaranteed bonds in exchange for a portion of their existing debt); retiming of debt (where creditor banks agree to accept interest payments at less frequent intervals – for example annually rather than semi-annually); and 'early bird specials' (where those banks that agree early to extend new loans to LDCs are guaranteed extra fees on their commitment): Biggs, "Nibbling away at the debt crisis: debt-for-nature swaps" (1991) 10 *Annual Review of Banking Law* 429, 430 notes 13-15.

<sup>43</sup> Cohen, "Give me equity or give me debt: Avoiding a Latin debt revolution" (1988) 10:1 *University of Pennsylvania Journal of International Business and Law* 89, 109.

<sup>44</sup> *Ibid* 112.

<sup>45</sup> Cole, "Debt-equity conversions, debt-for-nature swaps and the continuing world debt crisis" (1992) 30 *Columbia Journal of Transnational Law* 57, 63.

<sup>46</sup> Hrynik, "Debt-for-nature swaps: Effective but not enforceable" (1990) 22 *Case Western Reserve Journal of International Law* 141, 152.

<sup>47</sup> Buckley, "Debt exchanges revisited: Lessons from Latin America for Eastern Europe" (1998) 18:3 *Northwestern Journal of International Law and Business* 655, 683. Due to the potential disadvantages that he believes are associated with many DFE transactions, he regards its wide support by the IMF, the World Bank and the United States Treasury as 'obscene'.

<sup>48</sup> For example, in December 2000 Russia proposed to repay a portion of the US\$19 billion of Soviet-era debt it owed to Germany by transferring to the German Government (for eventual on-sale to German private companies) equity stakes in some of its most widely traded companies: "Russia offers Germans equity in debt payment", *New York Times*, 4 December 2000 at <[www.nytimes.com](http://www.nytimes.com)> (visited 5 December 2000).

The evolution of the DFE itself gave birth to other forms of non-equity debt exchanges that could be directed towards environmental and, ultimately, broader social and development issues, whilst (largely) allaying most of the major concerns of LDCs. In this sense, the establishment of the secondary market for LDC debt helped to 'mark the genesis' of the 'greening' of international finance.<sup>49</sup> This was a trend that has continued through initiatives such as the Global Environmental Facility (GEF)<sup>50</sup> and the Multilateral Fund established under the Protocol on Substances that Deplete the Ozone Layer (Montreal Protocol).<sup>51</sup>

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<sup>49</sup> Asiedu-Akrofi, "Debt-for-nature swaps: Extending the frontiers of innovative financing in support of the global environment" (1991) 25 *The International Lawyer* 557, 581.

<sup>50</sup> von Moltke, "Debt-for-nature: The second generation" (1991) 14 *Hastings International and Comparative Law Review* 973, 973. The GEF is a multilateral agency based in Washington that provides grants to developing countries to address cross-border environmental problems. Established in November 1990, it began initially as a three-year pilot program in 1991 to support globally beneficial environmental projects in those countries. Following its restructure in 1994, it entered into a permanent operational phase and is funded by sovereign donors. It focuses on projects relating to the following four issues of global environmental concern: (1) global warming; (2) pollution of international waterways; (3) loss of biological diversity; and (4) depletion of the stratospheric ozone layer. A governing council comprising of representatives of donor countries controls the GEF. The World Bank, United Nations Development Program (UNDP) and United Nations Environment Program (UNEP) are collectively responsible for implementing GEF programs: Jones, "The global environment facility's failure to promote sustainable forestry in Ecuador: The case of Ecoforest 2000" (1995) 14:3 *Virginia Environmental Law Journal* 507, 508, 519-520. The GEF has been criticised for not addressing the immediate local needs of developing nations: Dunoff, "From green to global: Toward the transformation of international environmental law" (1995) 19 *Harvard Environmental Law Review* 241, 290. It has also been criticised for concluding ineffective agreements based on political expediencies: "Going, going...", *New Scientist*, 10 June 2000 at 16. It has been further noted that "[a]fter ten years of discussion with Western governments, Brazil agreed to preserve just 10% of the forest that remains in return for cash from the World Bank's Global Environment Facility": *ibid.*

<sup>51</sup> 16 September 1987, in force 1 January 1989: (1987) 26 *International Legal Materials* 154. The fund was established to assist LDCs switch to CFC alternatives. von Moltke, "Debt-for-nature: The second generation" (1991) 14 *Hastings International and Comparative Law Review* 973, 973. It was initially set up as an Interim Financial Mechanism (IFM) but was transformed into a permanent multilateral fund in 1992. Its Executive Committee, which allocates various administrative and disbursement functions between UNEP, UNDP and the World Bank, controls disbursement by the Fund: Duval, "The future of the Montreal

The first debt exchange designed to promote environmental interests in LDCs was the debt-for-nature swap (DFN) implemented in 1987. This involves concessions by external lenders in exchange for enhanced resource management and conservation efforts by debtor countries.<sup>52</sup> This mechanism has attracted wide (though not unanimous) support as a 'dignified solution' to LDC debt and environmental degradation problems.<sup>53</sup> The 'debt-for-nature evolution'<sup>54</sup> has continued albeit with varying degrees of success and not without its critics.<sup>55</sup> The scope and magnitude of these transactions has grown significantly, encompassing a diverse range of projects extending far beyond the conservation purposes for which they were originally conceived. From 1987-1994, 26 DFN transactions had been agreed, involving approximately US\$1 trillion in LDC debt.<sup>56</sup> By 1998, the number had increased to 45, involving the participation of 16 developing countries.<sup>57</sup> The latest agreement announced by President Bush<sup>58</sup> represents a further example of the continued use of the DFN.

### III. 'DEBT-FOR-NATURE' TRANSACTIONS

The debt exchange mechanism is now an important tool of international finance addressing various matters of ecological,

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Protocol: Money and methyl bromide" (1999) 18:4 *Virginia Environmental Law Journal* 609, 615-616.

<sup>52</sup> Glennon, "Has international law failed the elephant?" (1990) 84 *American Journal of International Law* 1, 35.

<sup>53</sup> Alagiri, "Give us sovereignty or give us debt: Debtor countries' perspective on debt-for-nature swaps" (1992) 41 *American University Law Review* 485, 487.

<sup>54</sup> Lewis, "The evolving process of swapping debt for nature" (1999) 10:2 *Colorado Journal of International Environmental Law and Policy* 431, 431.

<sup>55</sup> For example, see Minzi, "The Pied Piper of debt-for-nature swaps" (1993) 14:1 *University of Pennsylvania Journal of International Business and Law* 37. Minzi argues that DFN transactions do not provide sufficient incentives for LDCs and asserts that direct financing is a more appropriate alternative to promote conservation of rain forests. He concludes that 'financial wizardry is not a substitute for the inevitable redistribution of wealth that the conservation of the rain forest will ultimately require': *ibid* 61-62.

<sup>56</sup> Neal, "Bringing developing nations on board the climate change protocol: Using debt-for-nature swaps to implement the clean development mechanism" (1998) 11 *Georgetown International Environmental Law Review* 163, 171.

<sup>57</sup> (11 June 2000) 109 *Global Futures Bulletin* 3. The geographical breakdown of these transactions was Asia (4), Africa (8), Latin America (31) and East Central Europe (2).

<sup>58</sup> See note 2 above.

developmental and social concerns. It has brought the 'mutual causality'<sup>59</sup> between the debt crisis and environmental degradation to the wider international community's attention. Future debt exchanges could conceivably address questions of economic development – both in terms of the sustainable growth of LDC economies and the reduction in LDC debt – and improve matters of global environmental concern significantly. Yet the first such debt exchanges had rather narrow aims, namely, to provide funding for forest conservation.

At the time of the 1982 debt crisis, most LDC foreign debt was denominated in United States dollars (or other hard currencies), hence requiring repayment in those currencies. In an attempt to meet debt-servicing demands, many Latin American countries (and other LDCs) employed short-term and often indiscriminate solutions in order to produce goods for export, thus generating foreign exchange for repayment. This often involved unsustainable exploitation of natural resources – in effect LDCs 'borrowing' from their natural resources<sup>60</sup> – usually resulting in longer-term and irreversible environmental degradation and added hardship for indigenous people. These 'quick fix solutions'<sup>61</sup> served to further undercut the economic potential of the country,<sup>62</sup> decreasing longer-term productivity and economic growth.<sup>63</sup> At the same time, attempts by an LDC to service its external debt continued to hamper its ability to devote resources to the environment,<sup>64</sup> particularly in view of other priorities – contributing to a downward economic and environmental spiral.

One of the most destructive activities undertaken by LDCs to meet debt-servicing demands was the clearing of their rain forests. Tropical

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<sup>59</sup> Barrans, "Promoting international environmental protections through foreign debt exchange transactions" (1991) 24 Cornell International Law Journal 65, 70.

<sup>60</sup> Alagiri, "Give us sovereignty or give us debt: debtor countries' perspective on debt-for-nature swaps" (1992) 41 American University Law Review 485, 486.

<sup>61</sup> Barrans, "Promoting international environmental protections through foreign debt exchange transactions" (1991) 24 Cornell International Law Journal 65, 70-71.

<sup>62</sup> Halperin, "Revenue Ruling 87-124: Treasuries flawed interpretation of debt for nature swaps" (1989) 42 University of Miami Law Review 721, 722.

<sup>63</sup> Webb, "Debt for nature swaps: The past, the present and some possibilities for the future" (1994) 11 Environmental and Planning Law Journal 222, 223.

<sup>64</sup> Logsdon, "Debt-for-nature evolves: The Enterprise for the Americas Initiative" (1992) 3 Colorado Journal of International Environmental Law and Policy 635, 637.

rain forests are primarily located in LDCs.<sup>65</sup> In the late 1980s, approximately 140,000 acres of tropical rain forest were being cleared in Latin America every day,<sup>66</sup> prompting predictions that by 2000, "tropical forests will have been largely destroyed".<sup>67</sup> As well as the clearing of forests to convert land to pasture or agriculture, significant amounts of timber were harvested for export,<sup>68</sup> much of it illegally.<sup>69</sup>

The destruction of rain forests has significant economic, political, environmental, cultural and social ramifications for LDC economies.<sup>70</sup> This 'export-led development'<sup>71</sup> emphasised short-term productivity but severely threatened longer-term sustainable development of rain forests. In many cases this strategy has had devastating effects. In Cambodia, for example, illegal logging alone represents 2% of the country's GDP and has resulted in the reduction of forest cover by 50% since the early 1970s. In Laos, the export of timber during 1997 accounted for 15% of its GDP. As well as the problem of deforestation, this has reduced the effectiveness of irrigation systems, resulting in widespread floods, drought and the failure of harvests.<sup>72</sup>

Even as the world's forests have decreased due to these shortsighted actions, LDC debt has continued to grow.<sup>73</sup> The increasingly parlous

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<sup>65</sup> Sher, "Can lawyers save the rainforest? Enforcing the second generation of debt-for-nature swaps" (1993) 17 *Harvard Environmental Law Review* 151, 157.

<sup>66</sup> Dillon, "The feasibility of debt-for-nature swaps" (1991) 16 *North Carolina Journal of International Law and Commercial Regulation* 127, 127.

<sup>67</sup> "Ecologists make friends with economists", *The Economist*, 15 October 1988 at 25.

<sup>68</sup> Buschbacher, "Ecological analysis of natural forest management in the humid tropics" in Goodland R (editor), *Race to save the tropics – Ecology and Economics for a Sustainable Future* (1990, Island Press, Washington DC) 59.

<sup>69</sup> Despite the United Nations' international efforts and some domestic measures, illegal logging continues to increase in countries such as Cambodia, Laos, Nigeria, Papua New Guinea, Philippines, Solomon Islands and Thailand: Peters, "Land and resource management – The illegal trafficking of timber in Cambodia" 1999 *Yearbook Colorado Journal of International Environmental Law and Policy* 102, 104.

<sup>70</sup> Greener, "Debt-for-nature swaps in Latin American countries: The enforcement dilemma" (1991) 7 *Connecticut Journal of International Law* 123, 134.

<sup>71</sup> *Ibid* 147.

<sup>72</sup> Peters, "Land and resource management – The illegal trafficking of timber in Cambodia" 1999 *Yearbook Colorado Journal of International Environmental Law and Policy* 102, 105.

<sup>73</sup> Hamlin, "Debt-for-nature swaps: A new strategy for protecting environmental interests in developing nations" (1989) 16 *Ecology Law Quarterly* 1065, 1066.

state of LDC economies has 'knock-on' effects on the economies of industrialised countries, with which they may have significant trading relations. Moreover, as the discussions relating to the problems of global warming tend to indicate, deforestation represents a matter of grave environmental concern, affecting the interests of all countries.<sup>74</sup> Tropical rain forests regulate global temperatures and are 'vast storehouses' of carbon.<sup>75</sup> They are areas of remarkable biological diversity – the Brazilian rain forests alone thought to be home to half the world's species<sup>76</sup> – and they are also a considerable source of natural products. The conservation of the world's forests<sup>77</sup> has become an important environmental challenge of global significance and together with global warming are regarded as "international problems, not localised concerns."<sup>78</sup>

In October 1984, Dr Thomas Lovejoy, then Executive Vice President of the World Wildlife Fund (WWF), proposed that debtor countries should be given discounts or credits for taking steps to address issues of environmental concern.<sup>79</sup> As part of this process, he suggested that governments play an important role by providing for tax relief to private creditors (banks) who participated in these transactions.<sup>80</sup>

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<sup>74</sup> Sadler, "Debt-for-nature swaps: Assessing the future" (1990) 6 *Journal of Contemporary Health Law and Policy* 319, 338.

<sup>75</sup> McGee and anor, "The deforestation of the Brazilian Amazon: Law, politics and international cooperation" (1990) 21:3 *University of Miami Inter-American Law Review* 513-519.

<sup>76</sup> *Ibid* 513.

<sup>77</sup> The United Nations Food and Agriculture Organisation (FAO) estimates that the world's rain forests have been reduced at the rate of 22 million acres annually during the five-year period 1995-2000: "UN reports world's forests are shrinking at slower rate", *New York Times*, 23 January 2001 at <[www.nytimes.com](http://www.nytimes.com)> (visited 24 January 2001). The FAO estimates that this represents a 20% decrease in the annual rate of deforestation compared to 1985: Planet Ark, "FAO says deforestation continues despite slowdown", *Reuters News*, 23 January 2001 at <[www.planetark.org](http://www.planetark.org)> (visited 24 January 2001).

<sup>78</sup> Biggs, "Nibbling away at the debt crisis: Debt-for-nature swaps" (1991) 10 *Annual Review of Banking Law* 429, 431.

<sup>79</sup> See Lovejoy, "Aid debtor nations' ecology", *New York Times*, 4 October 1984 at A31 where he reformulates an earlier suggestion made by Ira Rubicoff of the Smithsonian Institute; Juergensmeyer and anor, "Debt for nature swaps: A modest but meaningful response to two international crises" (1990) 5 *Florida International Law Journal* 193, 198 note 33.

<sup>80</sup> Hamlin, "Debt-for-nature swaps: a new strategy for protecting environmental interests in developing nations" (1989) 16 *Ecology Law Quarterly* 1065, 1067.

Whilst neither United States law makers nor the commercial banking community responded favourably to Lovejoy's suggestions, he is generally credited with providing the first public formulation of the DFN idea.<sup>81</sup> He emphasised the correlation between developing country indebtedness and environmental degradation,<sup>82</sup> thereby encouraging environmental NGOs to investigate using the LDC debt market to finance conservation projects. He noted that discounted LDC debt could potentially leverage "conservation dollars to preserve some of the world's most biologically valuable natural areas while helping countries reduce their external debt".<sup>83</sup> Flowing from his suggestions, the DFN was developed to fund forest conservation projects.

#### IV. THE STEPS IN A SIMPLE DEBT EXCHANGE TRANSACTION

Although the debt exchange transaction (DFN) is based on the simple notion of a reduction of external debt in return for domestic conservation activities<sup>84</sup> it is actually a complex transaction. For example, appropriate incentives must be established to encourage effective implementation and compliance.<sup>85</sup> Like most commercial transactions, the costs of any debt exchange will increase with its complexity. The transaction must therefore entail clear 'success measures'. Flexibility is crucial since what may be appropriate in one LDC may not be in another. The structure of a particular debt exchange mechanism should take account of a variety of factors including local economic conditions and political expediencies, cultural and social mores, the needs and development of any indigenous groups and the environmental priorities of the LDC government and the local and international NGOs involved.<sup>86</sup>

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<sup>81</sup> Gibson and anor, "A debt for nature blueprint" (1990) 28 *Columbia Journal of Transnational Law* 331, 333 note 9.

<sup>82</sup> Knupfer, "Debt-for-nature swaps: innovation or intrusion?" (1991) 4:2 *New York International Law Review* 86, 87.

<sup>83</sup> WWF News Release, "World Wildlife Fund and Ecuador sign large debt-for-nature swap", 14 December 1987 at 2, quoted in Asiedu-Akrofi, "Debt-for-nature swaps: Extending the frontiers of innovative financing in support of the global environment" (1991) 25 *The International Lawyer* 557, 564.

<sup>84</sup> von Moltke, "Debt-for-nature: The second generation" (1991) 14 *Hastings International and Comparative Law Review* 973, 975.

<sup>85</sup> Wee, "Debt-for-nature swaps: A reassessment of their significance in international environmental law" (1994) 6:1 *Journal of Environmental Law* 57, 67.

<sup>86</sup> For a more detailed discussion of many of the factors that are relevant to the



A simple DFN involves the acquisition of commercial LDC debt by an investor – typically an international environmental organisation acting together with a local environmental organisation. With certain forms of debt exchange mechanism, official sovereign debt (instead of private commercial debt) is utilised. The debt is presented to the LDC central bank for conversion into a local currency instrument, the proceeds of which are used for pre-agreed conservation, environmental or development purposes.<sup>87</sup>

Whilst each DFN is different, its process generally involves five steps:

1. An international environmental organisation negotiates the terms of a proposed debt exchange transaction with a LDC government and receives approval to establish a particular conservation, environmental or development project in that country. This normally involves the LDC, its central bank and a local environmental organisation participating. Alternately, agreement is reached between the respective LDC and a developed country's government.
2. The international organisation acquires an appropriate LDC debt instrument, usually through the international debt market, using money raised by or donated to that organisation.<sup>88</sup>

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ultimate structure of a debt exchange transaction, see Lachman, "Debt-for-nature swaps: A case study in transactional negotiation" (1989) 2 *Journal of Contemporary Legal Issues* 139, 143-153.

<sup>87</sup> Asiedu-Akrofi, "Debt-for-nature swaps: extending the frontiers of innovative financing in support of the global environment" (1991) 25 *The International Lawyer* 557, 564.

<sup>88</sup> There have, however, also been instances where debt has been directly donated by commercial lenders. For example, in 1988 Fleet Nortstar Bank of Rhode Island discharged US\$250,000 of Costa Rican debt as a 'normal charge-off' against its reserves: Hrynik, "Debt-for-nature swaps: effective but not enforceable" (1990) 22 *Case Western Reserve Journal of International Law* 141, 155 note 114. The debt was effectively donated by the bank to The Nature Conservancy, a conservation NGO: Hamlin, "Debt-for-nature swaps: a new strategy for protecting environmental interests in developing nations" (1989) 16 *Ecology Law Quarterly* 1065, 1074. For further discussion see Dillon, "The feasibility of debt-for-nature swaps" (1991) 16 *North Carolina Journal of International Law and Commercial Regulation* 127; Asiedu-Akrofi, "Debt-for-nature swaps: extending the frontiers of innovative financing in support of the global environment" (1991) 25 *The International Lawyer* 557; Lewis, "The evolving process of swapping debt for nature" (1999) 10:2 *Colorado Journal of International Environmental Law and Policy* 431; Minujin, "Debt-for-nature swaps – A financial mechanism to reduce debt and preserve the

Alternately, where developed country sovereign lenders are involved, they may agree to cancel LDC debt<sup>89</sup> or purchase it themselves in the debt market and then donate it to a LDC.<sup>90</sup> Where the debt is acquired in the international debt market, the participating LDC's debt should be purchased for a price sufficiently below its face value so as to outweigh establishment and implementation costs.<sup>91</sup> Conversion of debt should be structured so as to maximise the 'purchasing power' of the amounts involved. This is crucial to the overall success of the transaction<sup>92</sup> and represents a significant advantage of debt exchange transactions as compared with direct aid for conservation projects.<sup>93</sup>

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environment" (1991) 21:3-4 *Environmental Law and Policy* 146; Knupfer, "Debt-for-nature swaps: innovation or intrusion?" (1991) 4:2 *New York International Law Review* 86; Barrans, "Promoting international environmental protections through foreign debt exchange transactions" (1991) 24 *Cornell International Law Journal* 65; Halperin, "Revenue Ruling 87-124: Treasuries' flawed interpretation of debt for nature swaps" (1989) 42 *University of Miami Law Review* 721; Wilson, "The United States Agency for International Development as catalyst for debt for nature swaps" (1991) 10 *UCLA Pacific Basin Law Journal* 260, 272-273.

<sup>89</sup> For example, the 'debt-for-conservation' and 'debt-for-industry' exchanges that were implemented in Costa Rica discussed in Section V below.

<sup>90</sup> For example, see the 'debt-for-democracy' exchange implemented in Poland: *ibid.*

<sup>91</sup> Minujín, "Debt-for-nature swaps – a financial mechanism to reduce debt and preserve the environment" (1991) 21:3-4 *Environmental Law and Policy* 146, 147. In practice, LDC debt can generally be purchased at anywhere from 'a few cents in the dollar to parity': Sadler, "Debt-for-nature swaps: assessing the future" (1990) 6 *Journal of Contemporary Health Law and Policy* 319, 322.

<sup>92</sup> For example, assume the relevant LDC debt is acquired in the international secondary debt market at a purchase price of twenty cents in the dollar – an 80% discount to face value. If, upon conversion, the amount earmarked for the particular environmental and/or development project(s) is the equivalent of 80 cents in the dollar, then a leverage factor of four has been achieved. Every dollar actually spent by the international organisation (or developed country government) equates to a \$4 investment in the particular project. The extent of the leverage factor achieved depends on the precise circumstances. Nevertheless, the financial benefit of the debt exchange transaction should (significantly) exceed the costs involved for it to be regarded as a more effective financing mechanism in those circumstances than direct investment into the project.

<sup>93</sup> Lewis, "The evolving process of swapping debt for nature" (1999) 10:2 *Colorado Journal of International Environmental Law and Policy* 431, 433. Lewis cites the WWF's Living Planet Campaign, launched in 1996, as an example of a major rain forest conservation plan that does not involve a debt exchange: *ibid.* 433 note 10. However, other commentators argue that direct financing of conservation projects is a more economically sound approach given the large amounts of funding required:

3. Title to the debt instrument is transferred, the exact details of which depend on several variables, including tax, financial and accounting considerations. Title may be transferred to the international organisation, which then donates it to the local organisation, acquired directly by the local organisation (through funds provided to it by the international organisation) or transferred directly to the local organisation, to hold as the creditor's agent.<sup>94</sup> In circumstances involving country-to-country debt exchanges, the transaction may also involve elements of debt relief.<sup>95</sup>
4. The debt is converted by the central bank into a pre-agreed amount of local currency bonds or cash, to accord with the financing needs of the particular project(s) and to minimise any inflationary impacts. A 'leverage effect' may be possible, depending upon the exchange rate used and the proportion of the total value of the debt converted into local currency (as compared to the discounted purchase price in the international debt market).
5. The conservation, environmental or development program is implemented, managed by the local organisation in collaboration with the relevant government agencies, the international organisation or a development agency. Issues of enforceability, either through formal legal means or, as has predominantly been the case in most debt exchanges to date, based on informal relationships or political pressure, become important concerns. Many of the earlier transactions did not incorporate clear enforceability and dispute resolution procedures. However, as the debt exchange mechanism continues to develop as a financing technique for a broader range of projects and involving larger amounts of debt, questions of enforceability will assume a greater significance.

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Minzi, "The Pied Piper of debt-for-nature swaps" (1993) 14:1 *University of Pennsylvania Journal of International Business and Law* 37, 60. In order to limit any inflationary consequences, LDC governments have imposed limits on the size of DFN transactions. As a result, Minzi asserts that a meaningful level of funds required 'cannot be delivered through the swap mechanism': *ibid* 62.

<sup>94</sup> Sadler, "Debt-for-nature swaps: Assessing the future" (1990) 6 *Journal of Contemporary Health Law and Policy* 319, 322-323.

<sup>95</sup> Hansen, "Debt for nature swaps – overview and discussion of key issues" (1989) 1 *Ecological Economist* 77, 78.

## V. SELECTED DFN AND OTHER DEBT EXCHANGE TRANSACTIONS

Commencing with a relatively simple – though, as it transpired, not entirely successful – DFN transaction in 1987, the debt exchange mechanism has gradually evolved beyond the conservation of forests and has been used to address environmental, developmental and social issues in many LDCs. The following discussion briefly describes a number of transactions since 1987. This is not intended to be an exhaustive list nor is it a detailed description of every facet of those transactions. Rather, the examples illustrate the evolution of the debt exchange mechanism, to the point where it might now be considered for CDM projects and other sustainable development programs, ideally (but not necessarily) in conjunction with other forms of financing.<sup>96</sup>

### (a) *'First-Generation' Debt Exchanges*

The initial debt exchange involved the co-operation and agreement between private sector groups – environmental NGOs – and the LDC government and its central bank. These are often referred to as the 'First Generation' of debt exchange transactions, and first emerged in 1987 as a DFN in Bolivia.

#### (i) **Bolivia (1987) – 'Debt-for-Conservation'**

In 1987, Conservation International (CI), based in Washington, bought US\$650,000 of Bolivia's debt in the international debt market for about US\$100,000. Funding came from a grant given by a private charitable foundation.<sup>97</sup> Under the debt exchange agreement,<sup>98</sup> this debt was swapped for shares in a newly established company set up to preserve approximately 3.7 million acres of forests and grasslands surrounding the Beni Biosphere Reserve in north-eastern Bolivia,<sup>99</sup> an area noted

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<sup>96</sup> Whilst debt exchanges should be used for much larger projects in circumstances where appropriate incentives exist for all parties, the debt exchange alone cannot provide all of the funding required to achieve the purposes of regimes such as the CDM framework, including sustainable development. Clearly, the debt exchange mechanism will in most cases be more effective when coordinated with other financing programs such as the GEF.

<sup>97</sup> The Frank Weeden Foundation based in San Francisco.

<sup>98</sup> Agreement between the Government of Bolivia and Conservation International, 13 July 1987.

<sup>99</sup> Asiedu-Akrofi, "Debt-for-nature swaps: Extending the frontiers of innovative

for its biological richness.<sup>100</sup> CI agreed to provide ongoing assistance to Bolivia as 'official adviser' to plan and design the protected areas.<sup>101</sup> For its part, Bolivia undertook to provide legal protection in the form of congressional law status<sup>102</sup> for the 334,200-acre reserve<sup>103</sup> and to establish a local currency fund equivalent to US\$250,000 to manage and administer these protected areas.<sup>104</sup> Bolivia and a local NGO shared the management, and title of the land remained with Bolivia.<sup>105</sup>

Despite the agreement's relatively simple nature,<sup>106</sup> subsequent events raised several problems not initially anticipated. Some were teething problems associated with an untried financing mechanism while others came from the fact that the Bolivian DFN was the first debt conversion

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financing in support of the global environment" (1991) 25 *The International Lawyer* 557, 565.

<sup>100</sup> The reserve supports 6,000-8,000 species of vascular plants including at least 500 bird species and 13 endangered animal species: Gibson and anor, "A debt for nature blueprint" (1990) 28 *Columbia Journal of Transnational Law* 331, 354.

<sup>101</sup> "Bolivia sets precedent with first ever "debt-for-nature" swap", Conservation International News Release, 16 July 1987 at 1, quoted in Alagiri, "Give us sovereignty or give us debt: Debtor countries' perspective on debt-for-nature swaps" (1992) 41 *American University Law Review* 485, 495 note 58.

<sup>102</sup> Post, "The debt-for-nature swap: A long-term investment for the economic stability of less developed countries" (1990) 24:4 *The International Lawyer* 1071, 1082.

<sup>103</sup> Sadler, "Debt-for-nature swaps: Assessing the future" (1990) 6 *Journal of Contemporary Health Law and Policy* 319, 326.

<sup>104</sup> Bolivia was to contribute 40% of this sum with the remainder coming from the United States Agency for International Development (USAID) PL480 funds. USAID is an independent federal government agency that provides aid with the intention of achieving sustainable development and advancing United States foreign policy objectives: see "This is USAID" at <www.usaid.gov> (visited 5 January 2001). The PL480 Program refers to credits extended for food assistance under the 1954 Agricultural Trade Development Act (US): Gibson and anor, "The Enterprise for the Americas Initiative: A second generation of debt-for-nature exchanges – with an overview of other recent exchange initiatives" (1991) 25 *George Washington Journal of International Law and Economics* 1, 17. It enables the United States to acquire and transfer surpluses of agricultural foodstuffs to LDCs, which then pay for this food by making local currency available for use in development projects in their country: Gibson and anor, "A debt for nature blueprint" (1990) 28 *Columbia Journal of Transnational Law* 331, 356 note 118.

<sup>105</sup> Post, "The debt-for-nature swap: A long-term investment for the economic stability of less developed countries" (1990) 24:4 *The International Lawyer* 1071, 1082.

<sup>106</sup> Even so, it still took eight months to negotiate and implement the transaction: Burton, "Debt for development: A new opportunity for nonprofits, commercial banks, and developing states" (1990) 31 *Harvard International Law Journal* 233, 242.

of any type undertaken in that country<sup>107</sup> – there was no established DFE program in place at the time from which to draw guidance. When the proposed transaction was announced, various Latin American newspapers reported (incorrectly) that a foreign organisation had purchased Bolivian "lands considered the national patrimony".<sup>108</sup> Several Latin American countries criticised the idea of debt exchanges,<sup>109</sup> and even though the local organisation involved was able

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<sup>107</sup> Gibson and anor, "A debt for nature blueprint" (1990) 28 *Columbia Journal of Transnational Law* 331, 358.

<sup>108</sup> *Ibid* 356. Under the mistaken belief that this form of debt exchange transaction would lead to the sale of significant national land, one LDC official asked his American interviewer, "[H]ow would you like it if the Japanese used your trade deficit to buy the Grand Canyon?": Petesch and anor, "Debt-for-development plan is no gift for third world", *Los Angeles Times*, 9 December 1987 at 7, quoted in Post, "The debt-for-nature swap: a long-term investment for the economic stability of less developed countries" (1990) 24:4 *The International Lawyer* 1071, 1087.

<sup>109</sup> Brazil was one of the most vehement critics of the DFN mechanism initially. This was based largely upon its bad experiences in its own DFE program. Many opposed the implementation of any form of debt swap believing that it would legitimise Brazil's large and controversial debt. Traditionally, Brazil has vehemently maintained its sovereignty over the Amazonian rain forest. As early as the 1940s, its military challenged UNESCO's plans to create an international institution for the region. Since then, various 'conspiracy theories' alleging foreign threats to Brazil's control over the region have been espoused by both government and military officials: Piccirillo, "The metamorphosis: expected changes in the Brazilian debt-for-nature swap process and policy implications" (1994) 17 *Fordham International Law Journal* 547, 563-564. Partly as a reaction to this fear of loss of control over the Amazon region and a desire to create a 'Greater Brazil', Brazil embarked on a 30-year formal colonisation program designed to "mov[e] the people without land to the land without people": Le Breton B, *Voices from the Amazon* (1993, Kumarian Press, Connecticut) 58. This standpoint was reinforced by United Nations General Assembly Resolution 1803 which affirmed that a country retains its sovereignty over natural resources: United Nations GAOR, 17<sup>th</sup> Session, UN Doc A/5217 (1962), Supp No 17 at 15. It was also reinforced in the Brasilia Treaty for Amazonian Cooperation (The Amazon Treaty) signed on 3 July 1978. Under this treaty Brazil joined with its regional neighbours to affirm that a country's sovereignty allows it the inherent right to determine the exclusive use of the natural resources within its territory: 17 *International Legal Materials* 1045. Ten years later, the parties to the Amazon Treaty signed the non-binding Amazon Declaration on 6 May 1989 on the promotion of sustainable development practices in the region: 28 *International Legal Materials* 1303. Over time, Brazil's attitude towards the debt exchange altered. The government became more supportive of this principle and issued regulations in June 1991 to enable specified debt exchange transactions to be implemented. Subsequent proposals have called for these transactions to extend to a wider range of cultural and social projects: Piccirillo, "The metamorphosis: Expected changes in the Brazilian debt-for-nature

to explain the true position, the incident demonstrated clearly the sensitivities raised by these transactions.

Also, it became clear that the parties to the debt exchange agreement had failed to consult adequately with the local indigenous people prior to finalising the project, nor include them as a partner in the conservation planning.<sup>110</sup> Two months prior to the execution of the agreement, the government had created seven logging concession areas in the area.<sup>111</sup> At the time of the debt exchange the Chimane Indians who lived in the forest without any formal land tenure<sup>112</sup> tried to obtain title to the land. However, the debt exchange terms made this impossible.<sup>113</sup> Already fearful of significant destruction of their habitat through indiscriminate logging, they were now presented with an 'American-type' national park model<sup>114</sup> in which their ability to engage in traditional and life-supporting activities was further restricted.

In effect, the debt exchange agreement divested the Chimane of their land rights<sup>115</sup> since some of their traditional activities were suddenly

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swap process and policy implications" (1994) 17 *Fordham International Law Journal* 547, 579. For further discussion, see Neal, "Bringing developing nations on board the climate change protocol: using debt-for-nature swaps to implement the clean development mechanism" (1998) 11 *Georgetown International Environmental Law Review* 163; McGee and anor, "The deforestation of the Brazilian Amazon: Law, politics and international cooperation" (1990) 21:3 *University of Miami Inter-American Law Review* 513. A special congressional commission in Brazil is currently considering proposed legislation that could ease limits on how much forest may be cut down in the Amazon jungle: Sibaja "Brazil environmentalists face new battle on Amazon", *Reuters News*, 28 August 2001 at <[www.planetark.org](http://www.planetark.org)> (visited 28 August 2001).

<sup>110</sup> Gibson and anor, "The Enterprise for the Americas Initiative: A second generation of debt-for-nature exchanges – with an overview of other recent exchange initiatives" (1991) 25 *George Washington Journal of International Law and Economics* 1, 8.

<sup>111</sup> Gibson and anor, "A debt for nature blueprint" (1990) 28 *Columbia Journal of Transnational Law* 331, 358.

<sup>112</sup> Burton, "Debt for development: A new opportunity for non-profits, commercial banks, and developing states" (1990) 31 *Harvard International Law Journal* 233, 242 note 63.

<sup>113</sup> Lewis, "The evolving process of swapping debt for nature" (1999) 10:2 *Colorado Journal of International Environmental Law and Policy* 431, 436.

<sup>114</sup> Knupfer, "Debt-for-nature swaps: innovation or intrusion?" (1991) 4:2 *New York International Law Review* 86, 89.

<sup>115</sup> Webb, "debt for nature swaps: The past, the present and some possibilities for the future" (1994) 11 *Environmental and Planning Law Journal* 222, 227.

deemed to conflict with the conservation goals underlying the transaction.<sup>116</sup> The lack of local input represented a major failing of this transaction. It is therefore important to actively involve local communities in the planning of a DFN since the indigenous people living in a designated area will often be most directly affected by any restrictions relating to land use.<sup>117</sup>

To further complicate matters, Bolivia failed to contribute US\$100,000 to the local currency management account until almost two years after the agreement was signed.<sup>118</sup> As a result, USAID's proposed funding that was contingent upon Bolivia's contribution was not forthcoming and about US\$60,000 in interest for the Reserve's benefit was foregone.<sup>119</sup> Furthermore, Bolivia failed (initially) to enact legislation providing for the Reserve's legal protection. The issue was mired by the fact that the Beni region was one of Bolivia's principal areas for cocaine processing and export.

Overall, the results of the Bolivian transaction were mixed. The local indigenous community had not been engaged in the planning of the project. Also, the (largely unjustified) sovereignty concerns – described as 'ecological imperialism'<sup>120</sup> – prejudiced regional attitudes towards the initiative. Bolivia did not fully comply with its responsibilities, maybe partly due to the fact that, as with several subsequent transactions, the DFN agreement did not contain legally binding enforceability mechanisms.<sup>121</sup> In effect, enforceability had been

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<sup>116</sup> Lewis, "The evolving process of swapping debt for nature" (1999) 10:2 Colorado Journal of International Environmental Law and Policy 431, 437.

<sup>117</sup> Webb, "Debt for nature swaps: The past, the present and some possibilities for the future" (1994) 11 Environmental and Planning Law Journal 222, 227. Indigenous people often depend on their habitat area for their livelihood, using it for fuel, cooking, energy and medicine: Alagiri, "Give us sovereignty or give us debt: Debtor countries' perspective on debt-for-nature swaps" (1992) 41 American University Law Review 485, 487. Further, they engage in other fundamental activities closely associated with their cultural and societal systems.

<sup>118</sup> Gibson and anor, "A debt for nature blueprint" (1990) 28 Columbia Journal of Transnational Law 331, 357.

<sup>119</sup> Ibid.

<sup>120</sup> Alagiri, "Give us sovereignty or give us debt: Debtor countries' perspective on debt-for-nature swaps" (1992) 41 American University Law Review 485, 514.

<sup>121</sup> For more discussion on the non-enforceable character of many of the early debt exchange transactions, see Hrynik, "Debt-for-nature swaps: Effective but not enforceable" (1990) 22 Case Western Reserve Journal of International Law 141. The issue of



'sacrificed' and replaced with more 'subtle forms of enforcement'<sup>122</sup> in an attempt to build a long-term relationship with the government without further offending its sovereignty concerns.<sup>123</sup>

Despite the problems associated with the Bolivian transaction, it confirmed that exchanging LDC debt, even relatively small amounts, to advance conservation, environmental (and perhaps developmental) goals, was feasible, as long as due account was taken of relevant local conditions. Clearly this would be crucial since each debt exchange would be different depending on the specific circumstances involved. Bolivia's DFN provided further evidence of the close inter-relationship between a developing country's external debt levels and environmental degradation, which could also spur complimentary environmental support. After Bolivia implemented the DFN, the International Tropical Timber Organisation (ITTO)<sup>124</sup> provided a US\$1.26 million grant for continued forestry conservation.<sup>125</sup>

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enforceability is of greater significance when developed country 'public funds', such as United States taxpayers' money, are involved: Model, "Debt-for-nature swaps: Environmental investments using taxpayer funds without adequate remedies for expropriation" (1991) *University of Miami Law Review* 1195, 1203. Similarly, enforceability may become an important issue regarding other larger debt exchange transactions involving significant amounts of debt, and also where the mechanism might be applied to commercial transactions, possibly including projects falling within the CDM framework.

<sup>122</sup> Hrynik, "Debt-for-nature swaps: Effective but not enforceable" (1990) 22 *Case Western Reserve Journal of International Law* 141, 155-156.

<sup>123</sup> Hamlin, "Debt-for-nature swaps: A new strategy for protecting environmental interests in developing nations" (1989) 16 *Ecology Law Quarterly* 1065, 1087.

<sup>124</sup> ITTO is an international organisation that 'encourages the development of forestry alternatives that can be replicated in other countries': "The debt-for-nature exchange: A tool for international conservation" [1991] *Conservation International* 14 note 4, quoted in Lewis, "The evolving process of swapping debt for nature" (1999) 10:2 *Colorado Journal of International Environmental Law and Policy* 431, 436 note 26. The 1983 International Tropical Timber Agreement that created ITTO has been superseded by the 1994 International Tropical Timber Agreement (ITTA): 33 *International Legal Materials* 1014. Under ITTA, ITTO's primary purposes include providing an effective framework for consultation among producer and consumer states: "Land and resource management – forests" [1996] *Yearbook Colorado Journal of International Environmental Law and Policy* 68, 70.

<sup>125</sup> Gibson and anor, "The Enterprise for the Americas Initiative: A second generation of debt-for-nature exchanges – With an overview of other recent exchange initiatives" (1991) 25 *George Washington Journal of International Law and Economics* 1, 9. However, this forest management plan was difficult to implement due to conflicts of interest between various groups and the lack of interest in reforestation demonstrated

CI still remains involved in a range of conservation programs in Bolivia including the Beni Biological Station established by the 1987 transaction.<sup>126</sup> It has conducted further debt exchanges in Costa Rica, Guatemala, Madagascar and Mexico. By June 2000, these transactions have provided about US\$15 million in funds for environmental projects at an acquisition cost to CI of less than US\$7 million.<sup>127</sup> The Bolivian DFN represented the first step in an evolutionary process that continues to this day. The next stages were debt exchanges in Ecuador and Costa Rica that were implemented shortly afterwards and structured to address the issues arising from the Bolivian transaction.<sup>128</sup>

**(ii) Ecuador (1987) – 'Debt-for-Environment'**

Although only a small country, Ecuador is rich in biological diversity, with important natural habitats that include the Galápagos Islands,<sup>129</sup> rain forests, highlands, coastal savannah and mangrove forests.<sup>130</sup> Its burgeoning population and lack of financial resources place severe strains on its environment.

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by the timber companies: *ibid* 9 note 32.

<sup>126</sup> See Conservation International Website at <[www.conservation.org](http://www.conservation.org)> (visited 5 January 2001).

<sup>127</sup> Lewis, "The evolving process of swapping debt for nature" (1999) 10:2 *Colorado Journal of International Environmental Law and Policy* 431, 435 note 19.

<sup>128</sup> See discussion below.

<sup>129</sup> Tensions can arise between the goals of environmental protection and the needs of the local population. For example, the attempts by Ecuador's central government through laws enacted in 1998 to establish a marine reserve out to 40 miles around the shores of the Galápagos Islands and to impose fishing restrictions and a quota system, met with strong opposition from local fishermen and powerful commercial interests on the mainland: Rohter, "Where Darwin mused, strife over ecosystem", *New York Times*, 27 December 2000 at <[www.nytimes.com](http://www.nytimes.com)> (visited 28 December 2000). A major oil spill in the waters close to the Galápagos Islands in early 2001 highlighted further the significance of the whole issue of environmental protection. The Ecuadorian registered tanker, *Jessica*, ran aground 800 metres from the archipelago's main port resulting in over 160,000 gallons pouring into the sea, potentially resulting in significant damage to the local ecology: "Oil spill threatening heart of Galápagos ecosystem", *New York Times*, 23 January 2001 at <[www.nytimes.com](http://www.nytimes.com)> (visited 24 January 2001). This accident led to renewed calls for limits to shipping in the area: Evans "WWF urges shipping ban round Galapagos", *Planet Ark Reuters News*, 22 January 2001 at <[www.planetark.org](http://www.planetark.org)> (visited 24 January 2001).

<sup>130</sup> Gibson and anor, "A debt for nature blueprint" (1990) 28 *Columbia Journal of Transnational Law* 331, 359.

To help arrest continued environmental degradation Ecuador has undertaken an ambitious debt exchange program. In October 1987, it agreed to exchanges involving up to US\$10 million of its external debt. In 1988-1989, three environmental organisations<sup>131</sup> acquired this debt for US\$1.5 million<sup>132</sup> that was then assigned to a private Ecuadorian conservation group, *Fundación Natura* (FN).<sup>133</sup> Upon its conversion, the debt was exchanged at full face value into local currency bonds in FN's favour.<sup>134</sup> The principal amount funded FN's establishment<sup>135</sup> and an endowment fund to support its general activities.<sup>136</sup> FN uses interest generated by the bonds to undertake a diverse range of environmental related projects to protect Ecuadorian national parks and reserves.<sup>137</sup>

In contrast to the Bolivian transaction, the agreed conservation activities were undertaken by the local NGO alone, without government participation. This model has often been followed in later debt exchanges.<sup>138</sup> Moreover, by applying only interest payments to the

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<sup>131</sup> The WWF, The Nature Conservancy and the Missouri Botanical Gardens.

<sup>132</sup> O'Neill and anor, "Economics and the environment: Trading debt and technology for nature" (1992) 17 *Columbia Journal of Environmental Law* 93, 108.

<sup>133</sup> Lewis, "The evolving process of swapping debt for nature" (1999) 10:2 *Colorado Journal of International Environmental Law and Policy* 431, 437.

<sup>134</sup> The local currency of Ecuador at the time was the sucre. However, in 1999, Ecuador changed its local currency into United States dollars as part of an extensive restructuring of its financial system. It was an attempt to alleviate existing economic problems that have seen a doubling of the country's poverty rate in the period 1997-2000: "As U.S. military settles in, some in Ecuador have doubts", *New York Times*, 31 December 2000 at <www.nytimes.com> (visited 2 January 2001). El Salvador has followed this example and adopted the United States dollar to replace the colon as its official currency as from 1 January 2001: Gonzalez, "Gaining dollars, town is losing its folkways", *New York Times*, 1 January 2001 at <www.nytimes.com> (visited 2 January 2001). In late 2000, the Guatemala Congress approved measures to allow United States dollars to be used alongside the local currency, the quetzal. It has been suggested that this may represent the first step towards 'dollarisation' in that country: "Divided about the dollar", *The Economist*, 6 January 2001 at 36. Panama is the other Latin American country that has the United States dollar as its currency, having used it for that purpose since the country was formed: *ibid.*

<sup>135</sup> Lewis, "The evolving process of swapping debt for nature" (1999) 10:2 *Colorado Journal of International Environmental Law and Policy* 431, 437.

<sup>136</sup> Gibson and anor, "A debt for nature blueprint" (1990) 28 *Columbia Journal of Transnational Law* 331, 361.

<sup>137</sup> Biggs, "Nibbling away at the debt crisis: Debt-for-nature swaps" (1991) 10 *Annual Review of Banking Law* 429, 456.

<sup>138</sup> Following the success of this transaction, CI claimed that 'the best protected debt-for-nature exchanges are those that are supported by a local and international

conservation projects – as opposed to a large lump sum amount – the structure of this transaction minimised the potential for inflation.<sup>139</sup>

From an environmental funding viewpoint, the transaction was a success. Like many LDCs, Ecuador had found it difficult to devote significant financial resources to the environment given other priorities.<sup>140</sup> Even though the US\$10 million of debt represented only a fraction of Ecuador's total external debt,<sup>141</sup> the resulting environmental funding was very significant in the circumstances. Interest payments in the first year alone doubled Ecuador's entire budget for national parks, providing extra funds for environmental programs.<sup>142</sup> Instead of a mere 'subsidisation' of existing conservation investment this 'additionality' of funding is an important element in the success of a debt exchange.<sup>143</sup>

In view of the overall success of its initial program, Ecuador subsequently embarked on a US\$50 million debt exchange program to fund social, cultural, educational and environmental projects.<sup>144</sup> Its

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constituency that would protest loudly at any breach of the debt-for-nature agreement': "The debt-for-nature exchange: A tool for international conservation" (1991) *Conservation International* 29, quoted in Lewis, "The evolving process of swapping debt for nature" (1999) 10:2 *Colorado Journal of International Environmental Law and Policy* 431, 437.

<sup>139</sup> Gibson and anor, "A debt for nature blueprint" (1990) 28 *Columbia Journal of Transnational Law* 331, 360. The potential for inflation exists with respect to most forms of debt exchange transactions, although this has not been a significant issue for many debt exchanges due to the relatively small amounts of local currency involved.

<sup>140</sup> Halperin, "Revenue Ruling 87-124: Treasuries' flawed interpretation of debt for nature swaps" (1989) 42 *University of Miami Law Review* 721, 723.

<sup>141</sup> At the time, Ecuador's total external debt was US\$11.3 billion, of which US\$6 billion was owed to commercial banks: Gibson and anor, "A Debt for Nature Blueprint" (1990) 28 *Columbia Journal of Transnational Law* 331, 360. Despite attempts to improve its financial position, the country's external debt situation has not improved markedly. As at end December 2000, its foreign debt totalled US\$13 billion: "As U.S. military settles in, some in Ecuador have doubts", *New York Times*, 31 December 2000 at <[www.nytimes.com](http://www.nytimes.com)> (visited 2 January 2001).

<sup>142</sup> Gibson and anor, "A debt for nature blueprint" (1990) 28 *Columbia Journal of Transnational Law* 331, 360.

<sup>143</sup> Wilson, "The United States Agency for International Development as catalyst for debt for nature swaps" (1991) 10 *UCLA Pacific Basin Law Journal* 260, 268. Additionality of funding is also a requirement under the terms of the CDM: see note 267 below.

<sup>144</sup> Gibson and anor, "A debt for nature blueprint" (1990) 28 *Columbia Journal of Transnational Law* 331, 364.

experience gained through the utilisation of small initial transactions has led to the broadening of the debt exchange structure to address other areas of concern.

**(iii) Costa Rica (1987) – 'Debt-for-Conservation'**

Debt exchanges in Costa Rica have also been successfully implemented. Like those in Ecuador, the structure of the Costa Rican transactions reflected some of the lessons learnt from the Bolivian experience<sup>145</sup> and, through careful planning and negotiation, were eventually applied towards larger amounts of external debt. Within three years, in excess of US\$70 million of Costa Rica's external debt<sup>146</sup> was swapped into local currency bonds (equivalent to US\$36 million) through the implementation of four debt exchanges.<sup>147</sup> These funds have been utilised for conservation and wider environmental purposes.

Costa Rica is "one of the most ecologically well-endowed countries in the world"<sup>148</sup> and has designated 12% of its area as national parks. However, it lacks the necessary equipment, resources and personnel to adequately police these areas,<sup>149</sup> and outside of the park areas, still has an unacceptably high rate of deforestation.<sup>150</sup> Under debt exchange agreements in 1987<sup>151</sup> and 1998,<sup>152</sup> US\$5.4 million of its external debt was purchased in the international secondary market for US\$918,000,

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<sup>145</sup> Lewis, "The evolving process of swapping debt for nature" (1999) 10:2 Colorado Journal of International Environmental Law and Policy 431, 437.

<sup>146</sup> This represented about 5% of Costa Rica's then commercial debt: Gibson and anor, "A debt for nature blueprint" (1990) 28 Columbia Journal of Transnational Law 331, 364.

<sup>147</sup> Two of these transactions were 'Second Generation' debt exchange transactions.

<sup>148</sup> Asiedu-Akrofi, "Debt-for-nature swaps: Extending the frontiers of innovative financing in support of the global environment" (1991) 25 The International Lawyer 557, 565.

<sup>149</sup> *Ibid* 561.

<sup>150</sup> Gibson and anor, "A debt for nature blueprint" (1990) 28 Columbia Journal of Transnational Law 331, 364.

<sup>151</sup> Costa Rican Debt-for-Nature Agreement between the Costa Rican Central Bank, the Ministry of Natural Resources, Energy and Mines, the Costa Rican Cooperative Bank RL and Fundación de Parques Nacionales (the Costa Rican National Parks Foundation – a Costa Rican NGO) dated 27 October 1987: *ibid* 366 note 172.

<sup>152</sup> Debt-for-Nature Agreement between the World Wildlife Fund, Costa Rican Ministry of Natural Resources, Energy and Mines, Fundación de Parques Nacionales and the Costa Rican Central Bank, 4 March 1998.

funded by WWF and donations to the Costa Rican National Parks Foundation from a variety of other NGOs.<sup>153</sup> The debt was converted at 75% of face value into medium-term local currency bonds<sup>154</sup> with an average annual interest rate of 25%.<sup>155</sup> Interest income was used to establish a fund for conservation projects, including the Guanacaste National Park project, with title to land purchased reverting to the government only after the park was fully completed and endowed.<sup>156</sup>

Following the success of this debt exchange,<sup>157</sup> the central bank approved the conversion of a further US\$5.6 million of external debt, allowing for a second transaction to be implemented in January 1989.<sup>158</sup> CI, with the assistance of other donors, acquired the debt from American Express Bank for US\$784,000 and, upon conversion, the central bank issued US\$1.7 million in five-year bonds generating annual interest at 25%. Once again, interest income beyond US\$3 million was applied to conservation and environmental projects.<sup>159</sup>

**(iv) Sudan (1988) – 'Debt for Development'**

Gradually, the use of the debt exchange became more widespread, particularly in light of its flexibility as a financing mechanism. Narrowly focused DFN transactions could not in a meaningful manner contribute towards the abatement of poverty and the provision of basic

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<sup>153</sup> These included the Nature Conservancy, Asociacion Ecologica La Pacifica, Pew Charitable Fund, MacArthur Foundation, JS Noyes Foundation, Swedish Society for the Conservation of Nature, W Alton Jones Foundation, and Organisation for Tropical Studies and Conservation International: Gibson and anor, "A debt for nature blueprint" (1990) 28 *Columbia Journal of Transnational Law* 331, 369 note 187.

<sup>154</sup> These bonds were structured to mature after five years and nine months.

<sup>155</sup> Gibson and anor, "A debt for nature blueprint" (1990) 28 *Columbia Journal of Transnational Law* 331, 367.

<sup>156</sup> Alagiri, "Give us sovereignty or give us debt: Debtor countries' perspective on debt-for-nature swaps" (1992) 41 *American University Law Review* 485, 496.

<sup>157</sup> Some commentators, however, have criticised Costa Rica's debt exchanges. They argue that these debt exchanges displaced local farmers (some of whom faced expropriation as a result of Costa Rica's commitments under the debt exchange agreement) and did not serve local interests: Knupfer, "Debt-for-nature swaps: innovation or intrusion?" (1991) 4:2 *New York International Law Review* 86, 88-89.

<sup>158</sup> Costa Rica's debt exchanges were, however, negotiated on a case-by-case basis: Gibson and anor, "A debt for nature blueprint" (1990) 28 *Columbia Journal of Transnational Law* 331, 366 note 171.

<sup>159</sup> *Ibid* 369.

services in many LDCs. In some cases, preservation of areas such as rain forests could conflict with local interests,<sup>160</sup> including those of indigenous people living in that area, and with the more immediate priorities of the government. Some conservation projects might even exacerbate local poverty and increase demands on already depleted government social programs by eliminating income otherwise generated from activities restricted by the project.<sup>161</sup>

Consequently, for the debt exchange mechanism to be more effective, it was important that it could be adapted to facilitate social and economic progress in LDCs. Soon variations on the initial DFN model were developed. One of these was the debt-for-development exchange (DFD), used for programs that "make people their first concern".<sup>162</sup> A bank or sovereign creditor sells or donates LDC debt to an international development agency such as the United Nations Children's Fund (UNICEF) or a voluntary NGO such as CARE, already operating in the participating LDC.<sup>163</sup> The organisation then retires the debt in return for the LDC government commitment to support an agreed development program to be administered by the organisation. These programs are principally aimed at improving the standard of water, sanitation, reforestation, health education and nutrition, thus promoting societal development.<sup>164</sup>

In December 1988, Midland Bank donated its entire US\$800,000 portfolio of Sudanese debt to UNICEF. The Sudan government agreed to continue to service this debt in local currency payments and utilise it in several UNICEF-administered development programs.<sup>165</sup>

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<sup>160</sup> Biggs, "Nibbling away at the debt crisis: Debt-for-nature swaps" (1991) 10 Annual Review of Banking Law 429, 453.

<sup>161</sup> Barrans, "Promoting international environmental protections through foreign debt exchange transactions" (1991) 24 Cornell International Law Journal 65, 82.

<sup>162</sup> Burton, "Debt for development: a new opportunity for nonprofits, commercial banks, and developing states" (1990) 31 Harvard International Law Journal 233, 243.

<sup>163</sup> Cole, "Debt-equity conversions, debt-for-nature swaps and the continuing world debt crisis" (1992) 30 Columbia Journal of Transnational Law 57, 81.

<sup>164</sup> Buckley, "Debt exchanges revisited: Lessons from Latin America for Eastern Europe" (1998) 18:3 Northwestern Journal of International Law and Business 655, 673-674.

<sup>165</sup> Buckley, "The transformative potential of a secondary market: Emerging markets debt trading from 1983 to 1989" (1998) 21:4 Fordham International Law Journal 1152, 1211.

The use of DFD exchanges grew rapidly, eventually far exceeding the amount of debt involved in the DFN transactions from which they had evolved.<sup>166</sup> From 1987-1994, more than US\$750 million of LDC debt was cancelled through DFD transactions, much of it bilateral sovereign debt. During this period, UNICEF alone exchanged US\$193 million of debt and DFN transactions accounted for approximately US\$177 million of external debt.<sup>167</sup>

Part of the attraction of a DFD is that, by not involving foreign acquisition of local assets, it minimises those sovereignty concerns raised with some DFNs. Moreover, a DFD focuses on the direct needs of the local communities, rather than being 'driven' by the agenda of well-meaning but perhaps somewhat idealistic environmentalists.<sup>168</sup> The success of DFD swaps exemplifies the development of the debt exchange mechanism and its application, in appropriate circumstances, to significant amounts of debt in respect to a broad range of programs.

**(v) Ecuador (1990) – 'Debt-for-Education'**

The success of its earlier transactions led to further debt exchanges in Ecuador. In July 1990, Harvard University and Ecuador entered into the first 'debt-for-education' exchange. Harvard acquired US\$5 million of Ecuador's external debt in the international debt market at a cost of US\$775,000. The debt was exchanged into local currency bonds at 50% of face value.<sup>169</sup> These were transferred to a specifically formed local educational foundation, which then sold them into the local market, with the proceeds used to purchase United States dollars that were re-invested in the United States.

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<sup>166</sup> Ibid 1212.

<sup>167</sup> Buckley, "Debt exchanges revisited: Lessons from Latin America for Eastern Europe" (1998) 18:3 *Northwestern Journal of International Law and Business* 655, 674.

<sup>168</sup> Burton, "Debt for development: A new opportunity for nonprofits, commercial banks, and developing states" (1990) 31 *Harvard International Law Journal* 233, 242-243. Burton asserts that DFD swaps 'avoid many of the legal, economic, and moral pitfalls of nature swaps': *ibid* 243.

<sup>169</sup> Buckley, "The transformative potential of a secondary market: Emerging markets debt trading from 1983 to 1989" (1998) 21:4 *Fordham International Law Journal* 1152, 1213. Buckley asserts that the Ecuadorian government 'drove a hard bargain' by only converting the debt at 50% of face value, probably driven by the desire to limit the inflationary impact of the bonds: *ibid* 1213 note 363.



Most of the interest generated by this investment – about US\$150,000 annually – was used to fund scholarships and grants for Ecuadorian students to attend Harvard University,<sup>170</sup> with the balance funding local costs of research and study in Ecuador by students and faculty members from Harvard.<sup>171</sup> For the next ten years, it was hoped that 70 students and academics would benefit under this arrangement.<sup>172</sup>

**(b) 'Second Generation' Debt Exchanges**

The success of some 'first generation' transactions and growing international awareness of the relationship between the environment and LDC development opened the way for a new debt exchange involving exchange of 'public' debt.<sup>173</sup> These transactions were on a direct government-to-government basis and governments from developed countries played a central role in the process. This form of debt exchange reflected a convergence of interest between the respective governments.<sup>174</sup> It was an important development of the debt exchange because it allowed for larger amounts of debt. Significant external debt levels could now be converted for local currency financing of a more sophisticated range of projects extending well beyond the relatively narrow concerns of the early DFN deals.

Successful implementation of these larger transactions would also facilitate growing confidence in the use of debt exchanges for environmental and development purposes.<sup>175</sup> Not only could this be a

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<sup>170</sup> Dillon, "The feasibility of debt-for-nature swaps" (1991) 16 North Carolina Journal of International Law and Commercial Regulation 127, 140 note 92.

<sup>171</sup> Buckley, "Debt exchanges revisited: Lessons from Latin America for Eastern Europe" (1998) 18:3 Northwestern Journal of International Law and Business 655, 674-675 note 104.

<sup>172</sup> Biggs, "Nibbling away at the debt crisis: Debt-for-nature swaps" (1991) 10 Annual Review of Banking Law 429, 439-440 note 81. However, Biggs notes that there has been some criticism of this debt exchange as being potentially burdensome to Ecuador's economy, inflationary and beneficial only to the country's middle class.

<sup>173</sup> Lewis, "The evolving process of swapping debt for nature" (1999) 10:2 Colorado Journal of International Environmental Law and Policy 431, 439.

<sup>174</sup> von Moltke, "Debt-for-nature: The second generation" (1991) 14 Hastings International and Comparative Law Review 973, 983.

<sup>175</sup> For example, at their annual Economic Summit held in Paris in July 1989, the United States and other G-7 nations issued a communiqué supporting the DFN concept: Webb, "Debt for nature swaps: the past, the present and some possibilities for the future" (1994) 11 Environmental and Planning Law Journal 222, 236.

catalyst for other areas of joint activities, but it could also encourage significant involvement by large multi-national corporations in LDC projects, an important element in proposed regimes such as the CDM.

The scope of these debt exchanges requires the relationship between the parties to be 'predictable'.<sup>176</sup> As a result, these government-to-government transactions saw more substantive enforcement provisions included in the facilitating agreement. They also broadened the political dimensions of the transaction significantly, adding a further element of 'pressure' on the participating LDC to ensure compliance with its obligations. It would now need to consider the potential for political as well as economic damage it would suffer as a result of its failure to satisfactorily implement its agreement.<sup>177</sup>

Such pressures increase the need for greater transparency and minimise corruption and encourage (hopefully) other spheres of international co-operation. This would be crucial if more ambitious aims are to be pursued by using the debt exchange, such as its application to large-scale CDM projects. These government-to-government transactions became known as 'Second Generation'<sup>178</sup> debt exchanges.

**(i) Costa Rica (1989) – 'Debt-for-Conservation' and 'Debt-for-Industry'**

In January 1989, The Netherlands and Costa Rica agreed that the former would purchase US\$33 million of Costa Rican debt in the secondary debt market, to be converted into local currency four-year bonds, equivalent in value to US\$9.9 million.<sup>179</sup> Interest calculated at the annual rate of 15% was used to fund environmental projects. Despite the close relationship between the respective governments at

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<sup>176</sup> Sher, "Can lawyers save the rainforest? Enforcing the second generation of debt-for-nature swaps" (1993) 17 *Harvard Environmental Law Review* 151, 153.

<sup>177</sup> Sadler, "Debt-for-nature swaps: Assessing the future" (1990) 6 *Journal of Contemporary Health Law and Policy* 319, 335.

<sup>178</sup> For example, see von Moltke, "Debt-for-nature: The second generation" (1991) 14 *Hastings International and Comparative Law Review* 973; Sher, "Can lawyers save the rainforest? Enforcing the second generation of debt-for-nature swaps" (1993) 17 *Harvard Environmental Law Review* 151.

<sup>179</sup> Agreement on Financial Cooperation in order to Support Forest Development, January 1989, cited in Sher, "Can lawyers save the rainforest? Enforcing the second generation of debt-for-nature swaps" (1993) 17 *Harvard Environmental Law Review* 151, 170.

the time of this transaction, The Netherlands insisted on some new, though still 'informal', means of enforcement, although the agreement did not go so far as to include a dispute resolution mechanism.<sup>180</sup>

Soon afterwards, Sweden purchased about US\$28 million of Costa Rican debt for US\$3.5 million and donated it to Costa Rica's National Parks Foundation. Upon conversion, four-year bonds were created paying 15% annual interest that went into an endowment for research, environmental education, park management and land acquisition.<sup>181</sup>

The success of these transactions prompted Costa Rica to increase the promotion of development by using debt exchanges. The central bank created a new debt conversion program in 1989 to promote projects on conservation, small industry development and education. Since it believes that debt exchanges are a 'viable means' to pursue sustainable development,<sup>182</sup> wider use of this mechanism in Costa Rica is likely.

The involvement of developed countries in the 1989 Costa Rica debt exchanges allowed for more ambitious transactions. This involvement expanded the debt exchange mechanism, spawning further variants including DFD swaps in LDCs such as Sudan.<sup>183</sup> Even greater amounts of debt were earmarked for debt exchange transactions involving Poland's debt to the Paris Club of creditor countries.

**(ii) Poland (1991) – 'Debt-for-Democracy'**

In March 1991, seven major industrialised Paris Club countries agreed to forgive half of Poland's US\$33 billion debt.<sup>184</sup> Individual Paris Club

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<sup>180</sup> Ibid 171.

<sup>181</sup> The Guanacaste National Park Project Foundation: Gibson and anor, "A debt for nature blueprint" (1990) 28 *Columbia Journal of Transnational Law* 331, 370.

<sup>182</sup> Ibid 372.

<sup>183</sup> Buckley, "The transformative potential of a secondary market: Emerging markets debt trading from 1983 to 1989" (1998) 21:4 *Fordham International Law Journal* 1152, 1210-1211.

<sup>184</sup> The Paris Club consists of the major creditors of a country seeking a rescheduling of its debt. It is named after its usual meeting place, first 'formed' in 1956. It has no fixed membership, office or permanent administrative staff: Buckley, "Reschedulings as the groundwork for secondary markets in sovereign debt" (1998) 26:2 *Denver Journal of International Law and Policy* 299, 300 note 9. It has up to 17 members including Brazil, Canada, Japan, the United States and various western European

countries also agreed to channel interest payments and principal into a Polish Ecofund<sup>185</sup> to finance projects aimed at halting environmental damage.<sup>186</sup> The Paris Club had also authorised members to sell their debt or engage in debt exchanges involving local currency funding,<sup>187</sup> and this continued under the agreement with Poland.<sup>188</sup>

These actions were intended to show support for the democratic and economic reforms instituted in Poland following the recent introduction of a non-communist government.<sup>189</sup> After many years of economic mismanagement, Poland was suffering from severe economic stagnation which, coupled with its unsustainable debt burden,<sup>190</sup> had pushed it to the brink of insolvency.<sup>191</sup> In addition, Poland was a highly polluted country. To reduce the 'transboundary' effects of its pollution on neighbouring countries, the Paris Club Agreement was made conditional upon the implementation of environmental clean-up programs and anti-pollution measures in Poland.<sup>192</sup>

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countries: Lewis, "The evolving process of swapping debt for nature" (1999) 10:2 *Colorado Journal of International Environmental Law and Policy* 431, 442.

<sup>185</sup> *Ibid* 443.

<sup>186</sup> The four 'target areas' to be addressed by the Ecofund were: (1) transboundary air pollution, (2) pollution of the Baltic, (3) global warming, and (4) biodiversity and nature conservation: Agreement Regarding the Reduction and Reorganisation of Certain Debts Owed to, Guaranteed by, or Insured by the Government of the United States and its Agencies, 17 July 1991, cited in Sher, "Can lawyers save the rainforest? Enforcing the second generation of debt-for-nature swaps" (1993) 17 *Harvard Environmental Law Review* 151, 186-187.

<sup>187</sup> Agreed Minute on the Consolidation of the Debt of the Republic of El Salvador, 12 September 1990, quoted in von Moltke, "Debt-for-nature: The second generation" (1991) 14 *Hastings International and Comparative Law Review* 973, 983.

<sup>188</sup> Gibson and anor, "The Enterprise for the Americas Initiative: A second generation of debt-for-nature exchanges – with an overview of other recent exchange initiatives" (1991) 25 *George Washington Journal of International Law and Economics* 1, 66.

<sup>189</sup> *Ibid*.

<sup>190</sup> At the time Poland had the fourth largest external debt level in the world: Cole, "Cleaning up Kraków: Poland's ecological crisis and the political economy of international environmental assistance" (1991) 2 *Colorado Journal of International Environmental Law and Policy* 205, 217.

<sup>191</sup> *Ibid*.

<sup>192</sup> According to a Polish Government study in 1987, air and water pollution cost the Polish economy approximately US\$3.4 billion annually, representing 10% of gross national income. At the time of the Paris Club proposal, Poland derived 40% of its energy from 'dirty' coal-powered plants. This caused severe air pollution, much of which was 'exported' to neighbouring countries. Moreover, untreated sewerage from Poland – only half of the country's 800 cities had sewerage treatment facilities – was

The debt exchange was a two-stage process involving initial debt relief of 30%, followed by a further 20% to take effect three years after the successful implementation of various agreed measures, including a program stipulated by the IMF.<sup>193</sup> This was in addition to any debt relief proposal offered on a voluntary basis by individual creditor countries under terms permitted by the Paris Club 'rules'.

Prior to the announcement of the Paris Club Agreement, the (West) German government had agreed to forgive loans to Poland of up to US\$60 million that had been part of a package of agreements between the respective governments in 1971. Poland's implementation of conservation and environmental assistance activities was also a condition of this debt relief.<sup>194</sup> Under the Paris Club program, several creditor countries, including the United States, Switzerland, France, Sweden, Norway and Italy, have concluded debt exchange agreements with Poland, resulting in significant funds being injected into the Ecofund. Moreover, Polish officials have stressed that the establishment and financing of the Ecofund represents additional environmental funding, rather than a substitute for 'business-as-usual' funding.<sup>195</sup> Representatives of the creditor countries are involved in selecting appropriate environmental projects to be financed.<sup>196</sup>

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responsible for up to 28% of the phosphorous pollution in the Baltic Sea: *ibid* 206-207, 211; also, see Sher, "Can lawyers save the rainforest? Enforcing the second generation of debt-for-nature swaps" (1993) 17 *Harvard Environmental Law Review* 151, 186.

<sup>193</sup> Gibson and anor, "The Enterprise for the Americas Initiative: A second generation of debt-for-nature exchanges – With an overview of other recent exchange initiatives" (1991) 25 *George Washington Journal of International Law and Economics* 1, 66.

<sup>194</sup> Cole, "Debt-equity conversions, debt-for-nature swaps and the continuing world debt crisis" (1992) 30 *Columbia Journal of Transnational Law* 57, 80. Other conditions included support for German language teaching in Polish schools and protection of sites related to the German resistance against National Socialism: von Moltke, "Debt-for-nature: The second generation" (1991) 14 *Hastings International and Comparative Law Review* 973, 984.

<sup>195</sup> Gibson and anor, "The Enterprise for the Americas Initiative: A second generation of debt-for-nature exchanges – with an overview of other recent exchange initiatives" (1991) 25 *George Washington Journal of International Law and Economics* 1, 67. For example, in late 1990 Poland announced that it planned to spend about US\$160 million on environmental protection during 1991: Cole, "Cleaning up Kraków: Poland's ecological crisis and the political economy of international environmental assistance" (1991) 2 *Colorado Journal of International Environmental Law and Policy* 205, 220 note 99.

<sup>196</sup> Lewis, "The evolving process of swapping debt for nature" (1999) 10:2 *Colorado*

Undoubtedly the circumstances leading to these debt exchanges were unique. Western governments had strong political interests in Poland's transition from socialism to capitalism, which impacted upon the decision by the Paris Club countries to proceed.<sup>197</sup> Nevertheless, significant benefits have resulted from these transactions, which further expanded the scope and magnitude of the debt exchange mechanism. Earlier debt exchanges had not been utilised to finance environmental clean-up or emission control projects<sup>198</sup> – an interesting model to consider in the context of the Kyoto Protocol's aims. In view of the amounts involved, the proposal called for a "far more intrusive enforcement system" than in previous debt exchanges.<sup>199</sup> Furthermore, successful completion of the program demonstrates the adaptability of the mechanism and its ability to be applied to significant amounts of debt in order to facilitate social and economic development.

## VI. OTHER INITIATIVES

The development of DFN transactions and broader forms of debt exchanges has partly been encouraged by various United States Congressional initiatives, which have highlighted further the relationship between debt and the environmental and developmental position of LDCs. They have, however, largely stemmed from political motivation. The United States has significant bilateral trade, investment and strategic relationships with a number of those countries struggling under severe debt burdens particularly in Latin America. Its efforts to address their economies were designed to protect existing United States

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Journal of International Environmental Law and Policy 431, 443. The various agreements between Poland and the United States, Switzerland, France and Italy resulted in cash contributions into the Ecofund of US\$360 million, US\$50 million, US\$40 million and US\$32 million respectively.

<sup>197</sup> Gibson and anor, "The Enterprise for the Americas Initiative: A second generation of debt-for-nature exchanges – with an overview of other recent exchange initiatives" (1991) 25 *George Washington Journal of International Law and Economics* 1, 67. In 1989, Solidarity, a previously outlawed trade union, was legalised. Following elections, a non-communist government came to power in August that year and the Polish United Workers Party, known in the United States as the Communist Party, voted to disband on 29 January 1990: Cole, "Cleaning up Kraków: Poland's ecological crisis and the political economy of international environmental assistance" (1991) 2 *Colorado Journal of International Environmental Law and Policy* 205, 205, 235.

<sup>198</sup> *Ibid* 227.

<sup>199</sup> Sher, "Can lawyers save the rainforest? Enforcing the second generation of debt-for-nature swaps" (1993) 17 *Harvard Environmental Law Review* 151, 185.

interests since the high volume of trade with Latin American countries meant that the region's economic health was important to the United States economy. Stronger Latin American economies expand the potential market for United States goods, services and investment capital.<sup>200</sup> Moreover, the United States has long regarded political stability in Latin American countries – which is more likely to be threatened in times of economic crisis – to be a major tenet of its foreign policy.<sup>201</sup> Consequently, the United States has in recent years encouraged its lenders to participate in debt exchange transactions.

In addition, sentiment grew among United States lawmakers that various MDBs, such as the World Bank, should be accountable for the environmental effects of previous lending policies.<sup>202</sup> The United States has continued to apply political pressure on these institutions to develop more practical measures to address the issues. The World Bank, which for a long time did not adequately assess the environmental implications of the transactions with which it was involved, has established an environmental unit<sup>203</sup> with a more focused strategy intended to consider the need for sustainable development.<sup>204</sup> Support from institutions such as the World Bank and the IMF for the concept of the debt exchange, in conjunction with their own 'HIPC

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<sup>200</sup> Piccirillo, "The metamorphosis: Expected changes in the Brazilian debt-for-nature swap process and policy implications" (1994) 17 *Fordham International Law Journal* 547, 557.

<sup>201</sup> Cohen, "Give me equity or give me debt: Avoiding a Latin debt revolution" (1988) 10:1 *University of Pennsylvania Journal of International Business and Law* 89, 92.

<sup>202</sup> Post, "The debt-for-nature swap: A long-term investment for the economic stability of less developed countries" (1990) 24:4 *The International Lawyer* 1071, 1092.

<sup>203</sup> Hrynik, "Debt-for-nature swaps: Effective but not enforceable" (1990) 22 *Case Western Reserve Journal of International Law* 141, 148.

<sup>204</sup> As an example of the change in attitude amongst senior MDB officials, James Wolfensohn, President of the World Bank, wrote in early 2001: 'What about future lending? Access to external capital is fundamental to any country's development, but borrowers and lenders need to be vigilant about the long-term sustainability of the resulting debt': Wolfensohn, "Erasing poor nations' debt is only a start", *The Sydney Morning Herald*, 3 January 2001 at 8. This 'sensitivity' to long-term LDC development may be compared to a leaked 1992 internal memorandum by the then Chief Economist of the World Bank, Lawrence Summers (who subsequently became Treasury Secretary during President Clinton's second term) which suggested that LDCs should be able to 'sell their air for polluting to the highest bidder' and that therefore the Bank should 'be encouraging migration of dirty industries to less developed countries': "Pollution purgatory, fact or fiction?" *New Scientist*, 20 January 2001 at 9.

initiative<sup>205</sup> debt relief programs, allows for very significant amounts of debt to be utilised in this way.

At the same time, recognition of this debt-environment-development relationship has also led to increased international calls for far-reaching programs of debt relief,<sup>206</sup> part of which is slowly being implemented by the major industrialised countries.<sup>207</sup>

***(a) 1989 Global Environmental Protection Assistance Act (US)***

In April 1988, USAID<sup>208</sup> issued 'Debt for Development' guidelines that proposed funding to NGO intermediaries for approved debt exchanges. The NGOs would then be responsible for negotiating with qualifying LDCs and for managing the use of the resources acquired through the exchange. The proposal was structured to avoid any suggestion of overt debt forgiveness,<sup>209</sup> which the United States would find unacceptable.<sup>210</sup> The United States Congress reacted favourably to these guidelines and enacted the 1989 Global Environmental Protection

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<sup>205</sup> In 1996, the World Bank and IMF launched a program designed to identify those Heavily Indebted Poor Countries (HIPC) whose overall debt burdens should be reduced to a 'sustainable' level – defined primarily in terms of the net present value of the debt in relation to the country's exports – on condition that they demonstrated a record of several years of sound economic policy: "Can debt relief make a difference?" The Economist, 30 November 2000 at <www.economist.com> (visited 1 December 2000).

<sup>206</sup> In 1996, a loose coalition of church groups and aid organisations formed 'Jubilee 2000'. It lobbied for all debt for poor countries calculated at A\$360 billion to be reduced by the commencement of 2001: Wade, "\$110bn worth of forgiveness", The Sydney Morning Herald, 21 December 2000 at 9. The work of Jubilee 2000 has been continued by its successor organisation, Jubilee Plus.

<sup>207</sup> By end 2000, the world's major industrialised powers had promised debt relief of A\$110 billion. This represented loans to 22 of the world's poorest countries: *ibid.*

<sup>208</sup> For a description of USAID and its proposed involvement in the first Bolivian DFN swap, see note 104 above.

<sup>209</sup> Wilson, "The United States Agency for International Development as catalyst for debt for nature swaps" (1991) 10 UCLA Pacific Basin Law Journal 260, 275.

<sup>210</sup> However, as part of the HIPC Initiative (see note 204 above) and in response to the demands of groups such as Jubilee 2000 (see note 205 above), the United States agreed in late 2000 to fund US\$435 million to fulfil its obligations under its debt relief obligations for that year: Kahn, "Rich nations will forgive debts of 22 of the poorest", New York Times, 23 December 2000 at <www.nytimes.com> (visited 24 December 2000).



Assistance Act (GEPA)<sup>211</sup> that established funding and support for USAID's debt exchange activities.<sup>212</sup>

GEPA was the first United States law relating to debt exchange transactions.<sup>213</sup> Under the heading 'Debt-for-Nature Exchanges', Chapter 7 authorises USAID to grant funds to environmental NGOs for the purchase of secondary market debt of 'eligible' countries, to be used in debt exchange transactions.<sup>214</sup> To participate in an authorised transaction, the debtor country must have "the capacity, commitment and record of environmental concern to oversee the long-term viability of...the project".<sup>215</sup> To minimise sovereignty concerns, the legislation prohibits the United States government from taking title or an interest in land within a recipient country as a condition of the transaction.<sup>216</sup>

In 1989, WWF acquired US\$3 million of external Malagasy debt with USAID funds that were converted at face value into local currency and used to train and fund 400 park rangers.<sup>217</sup> It was also the first debt exchange transaction that USAID funded.<sup>218</sup> Further debt exchanges have since occurred in Madagascar<sup>219</sup> – which had, by 1998, reduced its \$100 million commercial debt by half by implementing debt exchanges – as well as in the Philippines and Guatemala. By 1998,

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<sup>211</sup> (1989) 22 USC §2281-2286. For a detailed description of the provisions of GEPA, see Wilson, "The United States Agency for International Development as catalyst for debt for nature swaps" (1991) 10 UCLA Pacific Basin Law Journal 260.

<sup>212</sup> *Ibid* 275.

<sup>213</sup> Lewis, "The evolving process of swapping debt for nature" (1999) 10:2 Colorado Journal of International Environmental Law and Policy 431, 444.

<sup>214</sup> Post, "The debt-for-nature swap: A long-term investment for the economic stability of less developed countries" (1990) 24:4 The International Lawyer 1071, 1093.

<sup>215</sup> Sher, "Can lawyers save the rainforest? Enforcing the second generation of debt-for-nature swaps" (1993) 17 Harvard Environmental Law Review 151, 172.

<sup>216</sup> Post, "The debt-for-nature swap: A long-term investment for the economic stability of less developed countries" (1990) 24:4 The International Lawyer 1071, 1094.

<sup>217</sup> Lewis, "The evolving process of swapping debt for nature" (1999) 10:2 Colorado Journal of International Environmental Law and Policy 431, 444.

<sup>218</sup> As discussed in Section V above, USAID had agreed to fund part of the financing required under the 1987 Bolivian DFN, but had withdrawn its support following Bolivia's failure to meet its commitments on time.

<sup>219</sup> The second USAID funded transaction in Madagascar, which was completed in 1990, was the first debt exchange to provide for the cancellation of trade credits: Gibson and anor, "The Enterprise for the Americas Initiative: A second generation of debt-for-nature exchanges – With an overview of other recent exchange initiatives" (1991) 25 George Washington Journal of International Law and Economics 1, 14.

USAID had provided US\$95 million to environmental NGOs for the acquisition of US\$146 million of external LDC debt, which was subsequently used in debt exchange transactions.<sup>220</sup>

Despite these achievements, there are inevitable problems associated with the disbursement of aid money to localised projects by large bureaucracies such as USAID. Bureaucratic overheads often absorb a significant proportion of the funds allocated towards a debt exchange program.<sup>221</sup> Moreover, decisions to fund (or not to fund) a particular project may be based on internal procedures not necessarily relevant to the proposal.<sup>222</sup> Notwithstanding current uncertainties regarding its future, previous USAID sponsored transactions have been significant and have emphasised the role of indigenous people in protected areas.<sup>223</sup> The incorporation into the debt exchange mechanism of procedures for the education and training of local indigenous people is one way of promoting 'behavioral modification',<sup>224</sup> which may lead to more long-term and sustainable modes of development.

*(b) 1990 Enterprise for the Americas Initiative Act (US)*

In June 1990, after meeting with South American leaders at the Andean Summit,<sup>225</sup> President Bush proposed a comprehensive plan to stimulate

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<sup>220</sup> Lewis, "The evolving process of swapping debt for nature" (1999) 10:2 Colorado Journal of International Environmental Law and Policy 431, 444.

<sup>221</sup> Gibson and anor, "The Enterprise for the Americas Initiative: A second generation of debt-for-nature exchanges – with an overview of other recent exchange initiatives" (1991) 25 George Washington Journal of International Law and Economics 1, 48.

<sup>222</sup> USAID has been described as a 'bloated bureaucracy'. During the eight-year term of the Clinton Administration, its size was cut from 10,000 to 7,300. President Bush has also criticised the bureaucratic nature of USAID and there have been calls for its abolishment and replacement with a smaller quasi-government foundation, the International Development Foundation: Schmitt, "Helms urges foreign aid be handled by charities", New York Times, 12 January 2001 at <www.nytimes.com> (visited 14 January 2001).

<sup>223</sup> Lewis, "The evolving process of swapping debt for nature" (1999) 10:2 Colorado Journal of International Environmental Law and Policy 431, 445.

<sup>224</sup> Alagiri, "Give us sovereignty or give us debt: Debtor countries' perspective on debt-for-nature swaps" (1992) 41 American University Law Review 485, 507.

<sup>225</sup> Gibson and anor, "The Enterprise for the Americas Initiative: A second generation of debt-for-nature exchanges – With an overview of other recent exchange initiatives" (1991) 25 George Washington Journal of International Law and Economics 1, 16.

economic growth and reduce trade barriers in the West.<sup>226</sup> This revolved around three 'pillars' (increased capital investment in Latin American and Caribbean countries, a proposed Free Trade Zone and debt reduction<sup>227</sup>) intended to show Latin American democracies that they would not be ignored in favour of Eastern Europe.<sup>228</sup>

Although it was primarily designed to stimulate growth and free trade,<sup>229</sup> the debt reduction aspects of this initiative were significant. Debt exchanges were formalised as an important component of United States policy for the region<sup>230</sup> indicating an increased governmental acceptance of the mechanism as an appropriate financing technique. The final form of the 1990 Enterprise for the Americas Initiative Act (US) (EAI)<sup>231</sup> authorised the exchange of bilateral sovereign debt for environmental protection programs, the first time official debt could be utilised in this way.<sup>232</sup> Under the EAI, the United States agreed to reduce debt owed by eligible countries and allow interest to be paid in local currency and at concessionary rates into a local environment fund.<sup>233</sup>

The original proposal envisaged the exchange of approximately US\$5 billion of Latin American debt with another US\$12 billion to be completely forgiven. After intense lobbying, Congress agreed to a debt reduction of US\$1.7 billion, representing only PL480 debt owed by the EAI. A subsequent legislative amendment allowed the relevant debtor countries to purchase up to 40% of debt owed to the United States Agriculture Department at market value.<sup>234</sup>

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<sup>226</sup> Sher, "Can lawyers save the rainforest? Enforcing the second generation of debt-for-nature swaps" (1993) 17 *Harvard Environmental Law Review* 151, 174.

<sup>227</sup> *Ibid.*

<sup>228</sup> Logsdon, "Debt-for-nature evolves: The Enterprise for the Americas Initiative" (1992) 3 *Colorado Journal of International Environmental Law and Policy* 635, 642.

<sup>229</sup> The trade and investment components of EAI were pursued through other measures: *ibid* 650-651.

<sup>230</sup> Piccirillo, "The metamorphosis: Expected changes in the Brazilian debt-for-nature swap process and policy Implications" (1994) 17 *Fordham International Law Journal* 547, 557.

<sup>231</sup> 7 USC § 1738.

<sup>232</sup> Lewis, "The evolving process of swapping debt for nature" (1999) 10:2 *Colorado Journal of International Environmental Law and Policy* 431, 445.

<sup>233</sup> von Moltke, "Debt-for-nature: The second generation" (1991) 14 *Hastings International and Comparative Law Review* 973, 984-985.

<sup>234</sup> Lewis, "The evolving process of swapping debt for nature" (1999) 10:2 *Colorado*

To qualify under the EAI, a country must meet eligibility criteria<sup>235</sup> including 'significant progress' in establishing an open investment regime, which itself may require compliance with various World Bank or IMF macroeconomic conditions.<sup>236</sup> Implementation is by way of an Environmental Framework Agreement (EFA), the first of which was signed between the United States and Chile on 27 June 1991, the anniversary of the announcement of the initiative. This agreement provided for the forgiveness of US\$15.7 million of PL480 debt in return for Chile allocating the interest payable on the remaining US\$23.6 million of debt to fund local environmental projects. By 1993, the United States had also signed EFAs with Argentina, Bolivia, Colombia, El Salvador, Jamaica, Peru and Uruguay, resulting in US\$875 million of debt being converted into the local currency equivalent of US\$154 million of environmental protection funding.<sup>237</sup>

The EAI illustrated how broad international economic, development and financial policy issues were interrelated with issues of environmental concern<sup>238</sup> and could be incorporated into a debt exchange.<sup>239</sup> Indeed, it highlighted the need to consider all the issues in tandem in light of the increasing concerns for global environmental and development issues. The program allowed for funding of a wide range of activities, from conservation to education and from agriculture to sustainable development projects.<sup>240</sup>

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*Journal of International Environmental Law and Policy* 431, 446.

<sup>235</sup> For a more detailed description of the mechanics of the EAI, see Logsdon, "Debt-for-nature evolves: The Enterprise for the Americas Initiative" (1992) 3 *Colorado Journal of International Environmental Law and Policy* 635.

<sup>236</sup> Gibson and anor, "The Enterprise for the Americas Initiative: A second generation of debt-for-nature exchanges – with an overview of other recent exchange initiatives" (1991) 25 *George Washington Journal of International Law and Economics* 1, 16.

<sup>237</sup> Lewis, "The evolving process of swapping debt for nature" (1999) 10:2 *Colorado Journal of International Environmental Law and Policy* 431, 446.

<sup>238</sup> The EAI is intended to 'promote debt reduction, investment reforms, and community-based conservation and sustainable use of the environment': see EAI section 1738a, cited in Logsdon, "Debt-for-nature evolves: The Enterprise for the Americas Initiative" (1992) 3 *Colorado Journal of International Environmental Law and Policy* 635, 643.

<sup>239</sup> von Moltke, "Debt-for-nature: The second generation" (1991) 14 *Hastings International and Comparative Law Review* 973, 985.

<sup>240</sup> Logsdon, "Debt-for-nature evolves: The Enterprise for the Americas Initiative" (1992) 3 *Colorado Journal of International Environmental Law and Policy* 635, 647.

Owing to changes in the United States' budget rules requiring prior appropriation of costs incurred by Treasury through debt reduction, no EFA has been signed since 1993.<sup>241</sup> However, further legislative amendments in 1998 facilitated a Peruvian debt buy-back, by which it repurchased 50% of its US\$350 million debt to the United States at net present value (US\$57 million). In return, it agreed to place the local currency equivalent of US\$22 million into a local environment fund.<sup>242</sup>

**(c) 1998 Tropical Forest Conservation Act (US)**

The 1998 Tropical Forest Conservation Act (US) (TFC) became law on 29 July 1998, another step in the debt exchange evolution. It addresses formally the relationship between levels of external indebtedness and the continuing eradication of tropical rain forests. It relieves developing countries of certain costs associated with foreign debt in exchange for a commitment to allocate resources to the preservation of rain forests.<sup>243</sup>

This Act reinforces the role that debt exchanges may play in alleviating issues of global concern. In its legislative findings on the TFC, the United States Congress made specific reference to the role that tropical rain forests play in reducing greenhouse gases in the atmosphere.<sup>244</sup> President Bush seized upon this link when announcing the latest TFC mandated transactions in July 2001. Even though the TFC applies only to activities relating to the conservation of rain forests, its use may also continue to encourage more widespread use of the debt exchange.

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<sup>241</sup> Lewis, "The evolving process of swapping debt for nature" (1999) 10:2 Colorado Journal of International Environmental Law and Policy 431, 451.

<sup>242</sup> *Ibid* 452.

<sup>243</sup> Neal, "Bringing developing nations on board the climate change protocol: Using debt-for-nature swaps to implement the clean development mechanism" (1998) 11 Georgetown International Environmental Law Review 163, 164. For a more detailed description of the TFC, see Lewis, "The evolving process of swapping debt for nature" (1999) 10:2 Colorado Journal of International Environmental Law and Policy 431, 452-460.

<sup>244</sup> The US Congress noted that '[t]ropical forests provide a wide range of benefits to humankind by...playing a critical role as carbon sinks in reducing greenhouse gases in the atmosphere, thus moderating global climate change...', Catalog of Public Laws, 105<sup>th</sup> Congress at <frwebgate.access.gpo.gov/cgi-bin...05\_cong\_public\_lawsanddo cid=f:publ214.105> (visited 7 January 2001); see also Neal, "Bringing developing nations on board the climate change protocol: Using debt-for-nature swaps to implement the clean development mechanism" (1998) 11 Georgetown International Environmental Law Review 163 note 5.

The TFC is modelled on the EAI,<sup>245</sup> but applies to *any* developing country with significant tropical rain forest resources. This may lead to opportunities for more developing countries in Africa and Asia to participate in official debt exchange programs with the United States.<sup>246</sup> Depending upon their experiences in this regard, it may also serve to further increase international expertise in the debt exchange process, expanding its potential for broader utilisation in sustainable development projects. By now, a number of debtor countries have entered into debt exchange arrangements with Canada, Switzerland and Germany as a result of the success of their earlier debt exchange experiences with the United States.<sup>247</sup>

Moreover, the TFC provides specifically for the protection of the rights of indigenous peoples and, like the EAI, encourages projects that include the involvement of local communities in planning and execution. It goes further than the EAI by facilitating funding for the "[d]evelopment and support of the livelihoods of individuals living in or near a tropical forest in a manner consistent with protecting such tropical forests".<sup>248</sup> By providing three types of debt exchange – debt reductions, debt buy-backs and debt swaps<sup>249</sup> – the TFC demonstrates the adaptability of the mechanism to apply to particular circumstances and may well encourage further creative uses of the debt exchange as a method of 'green' financing.<sup>250</sup>

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<sup>245</sup> Lewis, "The evolving process of swapping debt for nature" (1999) 10:2 *Colorado Journal of International Environmental Law and Policy* 431, 454.

<sup>246</sup> According to UNEP, four million hectares of forest are destroyed in Africa every year: "Bonn climate deal good for Africa, says UNEP, not so, says NGO", *Space Daily*, 27 July 2001 at <[www.spacedaily.com](http://www.spacedaily.com)> (visited 30 July 2001). At a recent press conference, the head of the Green Belt Movement, a Kenyan environmental group, urged foreign donors to make the protection of the country's dwindling forests a condition for future lending: Planet Ark, "Kenya greens urge donors to help preserve forests", *Reuters News*, 10 August 2001 at <[www.planetark.org](http://www.planetark.org)> (visited 10 August 2001).

<sup>247</sup> Lewis, "The evolving process of swapping debt for nature" (1999) 10:2 *Colorado Journal of International Environmental Law and Policy* 431, 465.

<sup>248</sup> 22 USC § 2431g(d)(6) quoted in *ibid* 457.

<sup>249</sup> During the course of Congressional debates, it was suggested that the debt reduction mechanism apply to 'the poorest countries', the buy-back option to middle income developing countries and the debt swap to 'lower income' developing countries: *ibid* 458.

<sup>250</sup> Only the debt reduction mechanism is restricted by the requirement of prior appropriations, though it is probable that out of the three options, this mechanism will

**(d) Debt Relief Initiatives of Other Industrialised Country**

In 1999, the leaders of the G-7 industrialised countries met in Cologne and pledged to forgive the debts of at least 20 countries by the end of 2000. In an era of unprecedented developed country prosperity, lobbying by groups such as Jubilee 2000 had made debt relief for the world's poorest countries a major political issue, especially in Western Europe. These concerns were exacerbated by the fact that direct foreign aid (DFA) to those countries, particularly from the United States, had fallen by nearly 25% during the latter part of the 1990s.<sup>251</sup> In addition, the United Nations has estimated that less than 1% of foreign direct investment (FDI) in 1999 went to the world's poorest countries.<sup>252</sup>

In response, the United Nations instituted an advisory panel in late 2000 to recommend ways to help these countries. The major industrialised countries, mindful of the lack of progress since the Cologne meeting and anxious to make even symbolic efforts to coincide with the new millennium, subsequently accelerated the process to announce debt relief proposals for 22 countries in late 2000. As part of these proposals, the United States has approved US\$435 million of debt relief that is fully financed by its 2001 budget.<sup>253</sup>

It is important to note that many of these debt relief initiatives, such as the earlier debt relief programs introduced in Poland,<sup>254</sup> come with (at times stringent) conditions. To qualify for debt relief from the G-7 countries, a debtor country must show that it will employ the amount

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be utilised in relation to the largest amount of debt. To satisfy the need for prior appropriations, the TFC specifically provides for the following appropriations – Fiscal Year 1999 (US\$50 million), Fiscal Year 2000 (US\$125 million) and Fiscal Year 2001 (US\$150 million): TFC §2431(d)(a)(2) and §2431e(a)(2)(A). The appropriation for 1999 was not completed due to timing constraints. It has been suggested that Congress will probably extend the authorisation for appropriations under the TFC to fiscal year 2002: *ibid* 456, 458-459.

<sup>251</sup> Crossette, "UN economic panel to study ways to help world's have-nots," *New York Times*, 16 December 2000 at <[www.nytimes.com](http://www.nytimes.com)> (visited 24 December 2000).

<sup>252</sup> *Ibid*.

<sup>253</sup> Kahn, "Rich nations will forgive debts of 22 of the poorest", *New York Times*, 23 December 2000 at <[www.nytimes.com](http://www.nytimes.com)> (visited 24 December 2000).

<sup>254</sup> See Section V above.

forgiven in 'constructive' ways, such as improving education, health care or through sustainable economic development.<sup>255</sup>

Of course, the imposition of these conditions will delay or even prevent the implementation of some debt relief programs,<sup>256</sup> despite many people, particularly in the debtor countries, believing that the LDC debt crisis was created by the western financial system.<sup>257</sup> Others argue that much of the Latin American debt should be unconditionally forgiven, since corrupt and illegitimate military dictatorships<sup>258</sup> had incurred it. Also, it was being wasted on 'pharaonic mega-projects',<sup>259</sup> with little tangible benefit to the general population. Traditionally, these views have contrasted with that of the United States whose creditor banks raise 'moral hazard' arguments<sup>260</sup> when faced with suggestions that international debt obligations are not legally binding.<sup>261</sup> The European and Japanese view advocates a 'partial' debt forgiveness program contingent on rigorous 'selection criteria'.<sup>262</sup>

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<sup>255</sup> Kahn, "Rich nations will forgive debts of 22 of the poorest", *New York Times*, 23 December 2000 at <www.nytimes.com> (visited 24 December 2000).

<sup>256</sup> As a result of the conditions associated with the G-7 debt relief programs, by the end of 2000 only one (Uganda) of the 22 countries had actually received all the benefits promised.

<sup>257</sup> Hamlin, "Debt-for-nature swaps: A new strategy for protecting environmental interests in developing nations" (1989) 16 *Ecology Law Quarterly* 1065, 1081.

<sup>258</sup> Piccirillo, "The metamorphosis: Expected changes in the Brazilian debt-for-nature swap process and policy implications" (1994) 17 *Fordham International Law Journal* 547, 567.

<sup>259</sup> Bramble, "Third world debt and natural resources conservation: Tragedy and opportunity" unpublished paper, quoted in Greener, "Debt-for-nature swaps in Latin American countries: The enforcement dilemma" (1991) 7 *Connecticut Journal of International Law* 123, 168.

<sup>260</sup> This has been described as any situation 'that rewards the sovereign debtor for financial misbehaviour': Buckley, "Debt exchanges revisited: Lessons from Latin America for Eastern Europe" (1998) 18:3 *Northwestern Journal of International Law and Business* 655, 679. The argument is that the unconditional forgiveness of debt may encourage other LDC debtor nations to default and hold environmental and development activities 'hostage to debt forgiveness': Gibson and Anor, "A debt for nature blueprint" (1990) 28 *Columbia Journal of Transnational Law* 331, 400.

<sup>261</sup> Cole, "Cleaning up Kraków: Poland's ecological crisis and the political economy of international environmental assistance" (1991) 2 *Colorado Journal of International Environmental Law and Policy* 205, 229.

<sup>262</sup> Burton, "Debt for development: A new opportunity for nonprofits, commercial banks, and developing states" (1990) 31 *Harvard International Law Journal* 233, 240.



There are doubtless merits associated with each of these viewpoints. It has been suggested that the implementation of unconditional large-scale debt forgiveness programs could benefit industrialised economies by increasing employment and their capacity in export-oriented industries, as well as various financial and political advantages arising from greater 'international harmony'.<sup>263</sup> However, it seems that, at least for the foreseeable future, a significant proportion of these large-scale debt relief initiatives will retain elements of 'conditionality'. As such, they represent a further extension of the debt exchange mechanism that is designed to swap external (and foreign currency denominated) debt into pre-agreed local currency funded development projects.

In practice, assuming the conditions are realistic and the programs have been implemented, this may mean that the debt exchange will continue to play a significant role in the LDCs' overall development.<sup>264</sup> The involvement of increasing numbers of industrialised countries, possibly in conjunction with institutions like the World Bank acting in the role as a 'broker' or a 'clearing house',<sup>265</sup> adds another dimension to the potential for using the debt exchange mechanism as a way to achieve sustainable development.

In this regard, the CDM may offer an important opportunity to take advantage of the experience gained in the past.

## **VII. THE CDM – NEW OPPORTUNITY FOR THE DEBT EXCHANGE?**

The Ministerial Agreements reached at the recently concluded Conference of the Parties to the UNFCCC (COP6 Part II) in Bonn have

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<sup>263</sup> O'Neill and anor, "Economics and the environment: Trading debt and technology for nature" (1992) 17 *Columbia Journal of Environmental Law* 93, 106.

<sup>264</sup> The use of the debt exchange alone, however, cannot solve all of the fundamental problems facing LDC countries. It will be important that properly focused bilateral and multilateral direct foreign aid programs are also introduced to apply in conjunction with debt exchange transactions.

<sup>265</sup> Post, "The debt-for-nature swap: A long-term investment for the economic stability of less developed countries" (1990) 24:4 *The International Lawyer* 1071, 1096. The constitutive documents of the World Bank and other MDBs prohibit them from participating directly in debt exchange transactions. This is because their loans cannot be sold in the international secondary debt market, cannot be converted to grants for environmental purposes and cannot be rescheduled: Gibson and anor, "A debt for nature blueprint" (1990) 28 *Columbia Journal of Transnational Law* 331, 393.

given renewed life to the Kyoto Protocol despite its rejection by the Bush Administration in March 2001.<sup>266</sup> The terms agreed at that conference are currently being documented into a 'ratifiable' treaty form, with growing optimism that the Kyoto Protocol will come into force during 2002, in time for the 'Rio+10' Conference.<sup>267</sup>

At the Bonn Conference, much of the remaining detail of the CDM was agreed to.<sup>268</sup> This mechanism allows for a variety of projects which result in reduced GHG emissions to be certified as suitable for the production of CERs, as long as they demonstrate "[r]eal, measurable, and long-term benefits related to the mitigation of climate change" by producing "emission reductions that are additional to any that would occur in the absence" of that project.<sup>269</sup>

Reforestation and afforestation activities may qualify under the CDM, as well as other emission reduction activities, such as those utilised as a part of the 'debt-for-democracy' exchanges implemented in Poland. The debt exchange could also be adapted to fund projects involving the transfer of 'clean' technology designed to produce reduced emissions, as well as the implementation of renewable energy projects. These types of programs may also fall within the CDM framework.

The flexibility of the debt exchange and its applicability to a wide range of projects give rise to the possibility that it may also be utilised to finance significant sustainable development programs within the framework of the CDM. Ironically, a mechanism utilised by the Bush Administration as a form of 'substitute' for action under the Kyoto Protocol could also play an important role in conjunction with other funding mechanisms within the framework of that instrument.

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<sup>266</sup> See note 4 above.

<sup>267</sup> See note 7 above. To become a binding document, ratification of the Kyoto Protocol is required by a minimum of 55 countries, accounting for at least 55% of total carbon dioxide emissions by industrialised countries in 1990. Given the United States' withdrawal from the Kyoto Protocol, it will be necessary for major GHG emitting industrialised countries such as Japan and Russia to ratify the treaty before it can come into force.

<sup>268</sup> See note 8 above.

<sup>269</sup> Article 12(5)(b)-(c) of the Kyoto Protocol.

This is not a new suggestion.<sup>270</sup> However, the 'resurrection' of the Kyoto Protocol after the Bonn Conference, despite the regrettable withdrawal of the United States, adds a sense of urgency to the question. An increasing number of scientists, including the influential Intergovernmental Panel on Climate Change (IPCC),<sup>271</sup> are tending towards a consensus (though not unanimous) view that measures should be implemented as soon as possible to redress the deleterious effects of GHG emissions on the global environment.

As confirmed at COP6 Part II, under the CDM such measures can be funded in many ways, either on a stand-alone basis or concurrently. These include bilateral and multilateral funding, provided that any such public funding is not a substitute for Overseas Direct Aid (ODA).<sup>272</sup> The debt exchange can be structured to satisfy these requirements and has the potential to provide another option to both industrialised and developing countries seeking to implement CDM certified projects. Every effort should therefore be made to consider in detail the potential for the debt exchange to represent a financing mechanism in relation to suitable CDM activities directed towards the achievement of sustainable development by developing countries.

Notwithstanding the obstacles to be overcome in relation to the effective implementation of the Kyoto Protocol and flexibility mechanisms such as the CDM, using the debt exchange in this way would encourage industrialised country participation in that regime. The reason is that it allows for existing debt to be used rather than requiring extra funding.<sup>273</sup> Further, developing countries participating in debt exchange-funded CDM projects will see their external debt

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<sup>270</sup> See Neal, "Bringing developing nations on board the climate change protocol: using debt-for-nature swaps to implement the clean development mechanism" (1998) 11 *Georgetown International Environmental Law Review* 163, 176.

<sup>271</sup> The World Meteorological Organisation and UNEP established IPCC in 1988, which brings together leading scientists from around the world and provides important input into the climate change process.

<sup>272</sup> International Institute for Sustainable Development, "Summary of the Resumed Sixth session of the Conference of the Parties to the UN Framework Convention on Climate Change: 16-27 July 2001" (30 July 2001) 176:12 *Earth Negotiations Bulletin* 7, 11, located at <[www.iisd.ca/linkages](http://www.iisd.ca/linkages)> (visited 31 July 2001).

<sup>273</sup> Neal, "bringing developing nations on board the climate change protocol: using debt-for-nature swaps to implement the clean development mechanism" (1998) 11 *Georgetown International Environmental Law Review* 163, 177.

levels reduced more significantly (depending on the size of the projects) as well as gain access to technology designed to reduce GHG emissions. This can only assist those countries in moving towards sustainable development and give them the confidence to engage in further co-operative activities with developed countries in various areas.

### VIII. CONCLUDING REMARKS

The debt exchange was initially conceived as a practical response to the international debt crisis that emerged in the early 1980s. The realisation that developing countries could not service their debt, let alone repay principal, forced lenders to create new financing methods to extract (at least partial) value from their loan portfolio.<sup>274</sup> As a result, an international secondary market in developing country debt developed which facilitated the sale of debt at (sometimes highly) discounted levels.

Environmentalists saw this as an opportunity to address conservation concerns and developed the 'debt-for-nature' swap. From a relatively small first transaction involving US\$650,000 in Bolivian debt, the debt exchange has grown immeasurably to provide financing for a wide variety of other LDC environmental and development programs.

The experience of early transactions raised questions of international law and sovereignty, indigenous rights, accountability, equity and social and economic priorities. The debt exchange has been sufficiently flexible to address these issues quite effectively, allowing for initiatives such as 'debt-for-development', 'debt-for-education' and 'debt-for-democracy' transactions.

In this way, the use of the debt exchange has highlighted the close relationship between the financial, environmental and developmental 'health' of developing countries. This has challenged traditional views

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<sup>274</sup> The commercial banks' dilemma has been described thus: "Bankers have realised that the costs of doing nothing [with their debts] is greater than the costs of doing something": Ryser and anor, "Deals that are making a dent in third world debt", *Business Week*, 3 October 1988 at 111, quoted in Burton, "Debt for development: a new opportunity for nonprofits, commercial banks, and developing states" (1990) 31 *Harvard International Law Journal* 233, 235.

that environmental degradation was a 'necessary evil' arising from development that economic prosperity may eventually have to compensate.<sup>275</sup> Not only were LDCs now able to have access to additional environmental and developmental funding, but their external debt levels were also reduced, affording them greater opportunity to rethink their priorities, possibly resulting in a gradual shifting towards strategies designed to promote more effective resource management and development.<sup>276</sup>

It is conceded that the debt exchange mechanism is not in itself a complete solution to the very significant problems associated with current levels of LDC debt, environmental degradation and the need for sustainable development by the world's poorest countries. However, it is clearly a financing tool that offers great benefits. The challenge is to continue the process of innovation and to seek ways to adapt the mechanism to even more ambitious areas. If this can be achieved, the debt exchange will, hopefully, play an important role in the development of a more equitable world.

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<sup>275</sup> Barrans, "Promoting international environmental protections through foreign debt exchange transactions" (1991) 24 *Cornell International Law Journal* 65, 68-69.

<sup>276</sup> Sadler, "Debt-for-nature swaps: Assessing the future" (1990) 6 *Journal of Contemporary Health Law and Policy* 319, 334.