

Environmental Finance

**Lessons Learnt from Experience
with Debt-for-Environment Swaps
in Economies in Transition**



ORGANISATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT

ORGANISATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT

The OECD is a unique forum where the governments of 30 democracies work together to address the economic, social and environmental challenges of globalisation. The OECD is also at the forefront of efforts to understand and to help governments respond to new developments and concerns, such as corporate governance, the information economy and the challenges of an ageing population. The Organisation provides a setting where governments can compare policy experiences, seek answers to common problems, identify good practice and work to co-ordinate domestic and international policies.

The OECD member countries are: Australia, Austria, Belgium, Canada, the Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Japan, Korea, Luxembourg, Mexico, the Netherlands, New Zealand, Norway, Poland, Portugal, the Slovak Republic, Spain, Sweden, Switzerland, Turkey, the United Kingdom and the United States. The Commission of the European Communities takes part in the work of the OECD.

OECD Publishing disseminates widely the results of the Organisation's statistics gathering and research on economic, social and environmental issues, as well as the conventions, guidelines and standards agreed by its members.

EAP TASK FORCE

The Task Force for the Implementation of the Environmental Action Programme for Central and Eastern Europe (EAP Task Force) was established in 1993 at the "Environment for Europe" Ministerial Conference in Lucerne, Switzerland. Its Secretariat was established at the OECD as part of the Centre for Co-operation with Non-Members. Since its creation, the EAP Task Force has proven to be a flexible and practical tool for providing support to political and institutional reforms in the countries of the region. After the Aarhus Ministerial Conference in 1999, its efforts were refocused on the countries of Eastern Europe, Caucasus and Central Asia (EECCA). More detailed information about Task Force activities can be found on its website at: www.oecd.org/env/eap

© OECD 2007

No reproduction, copy, transmission or translation of this publication may be made without written permission. Applications should be sent to OECD Publishing: rights@oecd.org or by fax (+33-1) 45 24 13 91. Requests for permission to photocopy a portion of this work should be addressed to the Centre Français d'exploitation du droit de copie, 20 rue des Grands-Augustins, 75006 Paris, France (contact@cfcopies.com).

FOREWORD

This report summarises the major lessons learnt from the experience with debt-for-environment swaps (DFES) in selected transition economies of Central and Eastern Europe, Caucasus and Central Asia. It presents the key steps in designing, negotiating and implementing DFES in low-income countries that have accumulated significant external debt and face challenges with servicing this debt.

The report draws primarily on the experience of Poland, Bulgaria, Georgia and the Kyrgyz Republic but relevant cases and lessons from other countries in the world are included, as appropriate.

These lessons are mostly targeted at the low-income countries in the Eastern Europe, Caucasus and Central Asia (EECCA) region but they may be valuable for countries from other parts of the world which are at a similar level of income, face similar challenges with servicing their external debt and consider swapping debt for environmental purposes.

The report was prepared in the framework of the Task Force for the Implementation of the Environmental Action Programme for Central and Eastern Europe (EAP Task Force), whose Secretariat is located in the OECD's Environment Directorate. The report was written by Nelly Petkova (from the Environment and Globalisation (EG) Division) under the guidance and supervision of Xavier Leflaive (Head of the Environmental Finance Programme at the EG Division).

The report was reviewed by Brendan Gillespie from the OECD (Head of the EG Division), Stanislaw Sitnicki (Polish EcoFund), Prof. Tomasz Zylicz (Warsaw University, Poland) and Dimiter Nenkov (Bulgarian National Trust Ecofund) provided useful comments on the report. Carla Bertuzzi helped with collecting and verifying statistical data. Claire Condon provided administrative support to the project. All these contributions are gratefully acknowledged.

The preparation of this report was financially supported by the Government of Poland, through its Ministry of Environment.

The views expressed in this report are those of the authors and do not necessarily reflect those of the OECD or its member countries.

TABLE OF CONTENTS

FOREWORD	3
EXECUTIVE SUMMARY	7
CHAPTER 1. INTRODUCTION.....	10
CHAPTER 2. DEBT-FOR-ENVIRONMENT SWAPS IN THE CONTEXT OF DEBT RESTRUCTURING	12
The international context for debt relief and debt restructuring.....	13
DFES in debt reduction strategies.....	15
Possible debt swap operations.....	16
Major lessons learned.....	25
CHAPTER 3. KEY STEPS IN PREPARING A DEBT-FOR-ENVIRONMENT SWAP... 27	
Intragovernmental approach.....	27
Analysis of the debt profile and DFES revenue forecast	28
Defining the expenditure programme	33
Major lessons learnt	35
CHAPTER 4. INSTITUTIONAL OPTIONS FOR THE MANAGEMENT OF THE DFES EXPENDITURE PROGRAMME.....	38
Swap implementation models	38
Institution for expenditure management	44
Governance and management	47
Major lessons learnt	52
CHAPTER 5. CONCLUSIONS	54
REFERENCES	56
ANNEXES	58
Annex I: Examples of bilateral debt-for-environment swaps (in USD, end of 2003).....	58
Annex II: Selected Paris Club creditors' debt reduction programmes.....	60
Annex III. Possible co-financing rates per project type	61
Annex IV: Glossary of major terms	62

Tables

Table 1.	Selected debt service indicators in EECCA countries	31
Table 2.	Major milestones in the preparatory process for debt-for-environment swap	55

Figures

Figure 1.	Model of bilateral swap	39
Figure 2.	Model of trilateral swap	39
Figure 3.	Bilateral swaps on a project-by-project basis	42
Figure 4.	Bilateral swaps through a local financial institution	43

Boxes

Box 1.	What is the Paris Club?	12
Box 2.	The HIPC Initiative	13
Box 3.	The CIS-7 Initiative	14
Box 4.	Kyrgyz experience with debt restructuring, debt relief and DFES	15
Box 5.	What is a debt-for-environment swap?	16
Box 6.	Debt swap terms	17
Box 7.	Links between debt, environment and poverty	21
Box 8.	DFES - major opportunities	22
Box 9.	DFES and unconditional debt relief: the case of Poland	23
Box 10.	Fiscal capacity to service debt swaps and macroeconomic risks	24
Box 11.	Kyrgyz experience with developing potential project pipelines	34
Box 12.	Example of a trilateral swap	40
Box 13.	Polish EcoFund governance structure	46
Box 14.	Minimum criteria for good governance of the financial institution	47
Box 15.	Governance issues in the Bulgarian National Trust Ecofund	48

Charts

Chart 1.	Debt swaps by type, end 2000	19
Chart 2.	Composition of public external debt of the Kyrgyz Republic by creditor type ...	29
Chart 3.	Estimated revenue flows from a DFES in Georgia under alternative scenarios of creditors' participation (Thousand Euro)	32

List of abbreviations

CEE	Central and Eastern Europe
CI	Conservation International
CIS	Commonwealth of Independent States
DFES	Debt-for-environment swap
EAP TF	Task Force for the Implementation of the Environmental Action Programme for Central and Eastern Europe
EBRD	European Bank for Reconstruction and Development
EC	European Commission
EECCA	Eastern Europe, Caucasus and Central Asia
EU	European Union
FDI	Foreign direct investment
GDP	Gross domestic product
GEF	Global Environment Facility
HIPC	Heavily Indebted Poor Countries (initiative)
IFI	International financial institution
IMF	International Monetary Fund
KfW	Kreditanstalt für Wiederaufbau (German Bank for Reconstruction)
MDGs	Millennium Development Goals
MDRI	Multilateral Debt Relief Initiative
NGO	Non-governmental organisation
NPRS	National Poverty Reduction Strategy
NPV	Net present value
NTEF	National Trust EcoFund (of Bulgaria)
ODA	Official development assistance
O&M	Operation and maintenance (costs)
OECD	Organisation for Economic Co-operation and Development
PRSP	Poverty Reduction Strategy Paper
UNICEF	United Nations Children's Fund
UNDP	United Nations Development Programme
USAID	United States Agency for International Development
USD	US Dollar
WSSD	World Summit for Sustainable Development
WWF	World Wildlife Fund

EXECUTIVE SUMMARY

Debt swaps provide opportunities for raising capital in low-income countries to address environmental and other policy challenges. There are also a range of risks and management issues that need to be addressed if debt swaps are to achieve their objectives.

The rationale of debt swaps is that debt can be acquired at a discount. When creditors do not expect to recover the full nominal value of debts, they may be willing to accept less. In exchange for (partial) cancellation of the debt, the debtor government is prepared to mobilise the equivalent of the reduced amount in local currency for agreed purposes on agreed terms.

By 2000, according to the World Bank (2003), an estimated USD 4.2 billion of official debt had been swapped for local currency. Of this amount, USD 2.2 billion was in the form of debt-for-equity swaps, USD 1.6 billion was for debt-for-environment swaps, including debt-for-development, while other swap arrangements accounted for the remaining USD 0.4 billion.

Debt swaps are normally negotiated in the context of debt restructuring. Debtor countries qualify if they are heavily indebted (according to IMF standards), if they have exhausted other more favourable debt relief instruments (e.g. unconditional debt relief), and if they can convince creditors that they are capable of allocating a sustainable part of the resources that have been budgeted for debt repayment to finance domestic projects which will yield significant environmental benefits at national, regional, or global level.

Recent changes in the international community create a window of opportunity for the development of debt-for-environment (or nature) swaps (DFES). First, the international community has become more supportive of the debt reduction for low-income countries. There is a momentum supporting debt cancellation in these countries. Second, environment has risen in the international political agenda, as is illustrated by major concerns for climate change and energy efficiency. Third, the Paris Club of creditors have accumulated experience with DFES mechanism, which makes such transactions feasible in the future.

The potential benefits of DFES for low-income countries are manifold. DFES can alleviate the macro-economic burden of debt repayment in hard currency. They can generate a substantial and stable stream of revenues to address environmental problems of national, regional and/or global significance; in so doing, they can contribute to internationally-agreed objectives, such as the Millennium Development Goals or multilateral agreements which deal with environment and/or poverty alleviation. Debt-for-environment swaps are also a practical instrument to mainstream environmental objectives into the economic and social agenda of the debtor country. DFES avoid the adverse budgetary and inflationary risks associated with other forms of debt swaps (in particular debt-for-equity swaps). Implementing DFES within a robust institutional framework can help build capacity in managing public environmental expenditure in accordance with international good practices. In addition, projects financed through DFES can contribute to peace and security in the region by alleviating regional and cross-border conflicts.

There are risks involved with DFES. Negotiating a debt swap can downgrade the country's credit rating. It can also distort more favourable debt treatment operations (debt relief and restructuring). Because DFES is a long term commitment, it is sensitive to macro-economic and political instability. The deterioration of the fiscal situation in a debt swap country can undermine the capacity of the

debtor country to meet its obligations. In addition, there is a risk that the revenues generated by the DFES will be mismanaged and that the environmental objectives will not be met.

Lessons learnt from international experience are useful and can help debtor countries, and their creditor partners, to make the best use of this mechanism while mitigating the risks attached to it. Lessons apply to the three main steps in the design, negotiations and implementation of a DFES.

Preliminary steps to open the negotiations

There are three basic prerequisites that should be met before a low-income country launches a discussion on the possibility of a DFES:

- A thorough analysis of the debt portfolio is needed to assess the amount of debt potentially eligible to be swapped and the possible revenues from the swap. A realistic assessment should take into account that only official sovereign and sovereign guaranteed bilateral debt is eligible for debt swaps and some creditors may not be willing to embark on a DFES;
- Preparing, negotiating, and implementing a DFES is a complex, difficult, and lengthy process. Preparatory activities can take between two to four years. Full and lasting government support is crucial; in particular, the ministry of finance (that leads the discussions with creditors) has to be convinced of the benefits of the mechanism;
- A credible fiscal capacity to service the debt swap should be demonstrated, as the debtor country will commit itself to allocating a stable share of its budget to finance environment policies and projects. This commitment should be included in the Budget Law for each year over the period of the DFES or in the debt-conversion treaty with the creditor.

The context of the negotiations

DFES should be considered in the context of the country's overall debt management strategy and integrated into strategic negotiations on long-term approaches to debt treatment. When opening the discussion on the feasibility of a DFES, countries should keep in mind that:

- Best results are achieved when DFES are realised within the framework of negotiations with Paris Club creditors. The discussion is easier if the agreement between the debtor country and the Paris Club contains an explicit clause which allows creditors to undertake, on a bilateral and voluntary basis, individual debt swaps, including DFES, with the debtor country;
- DFES should not limit the opportunities for unconditional debt relief or restructuring in the future, as unconditional debt relief is preferable to conditional swaps. However, DFES should be proposed immediately after unconditional relief has been exhausted (an additional "sweetener") and should be prepared early in the process;
- The DFES should not be proposed if the overall macroeconomic situation in the country is improving and the external debt level is sustainable (by IMF criteria);
- A credible expenditure programme that responds to both the debtor and creditor countries' priority concerns is key for attracting creditors' attention. The expenditure programme should be realistic, narrowly-focused on a few priorities, and should demonstrate a solid pipeline of attractive projects. The programme should be based on transparent and robust

project selection criteria and implementation rules and procedures. Even if the DFES does not materialise, the project pipelines remain valid and could be used by the debtor government in other contexts (e.g. discussions with donors when developing technical cooperation programmes);

- The proposed expenditure programme should be designed so as to leverage additional finance from other sources. This is crucial, particularly for large investment pipelines where DFES resources alone would not be sufficient.

The implementation of the DFES

The institutional options for governance and management of the expenditure programme should be carefully analysed in light of the existing legal framework in the country, the stream of revenues (amount, period) and the nature of the project pipelines.

The administrative costs of managing the DFES should be weighted against the potential annual flows under the DFES. Experience shows that these administrative costs should not represent more than 5% of the annual revenue for the scheme to be economically viable. These costs should be taken into account before a decision to establish a dedicated institution to manage and monitor the DFES is made.

Creditors should be convinced that the debtor country has the capacity and is committed to manage debt swap revenues in an efficient and accountable way. This will require development of clear and transparent rules and procedures for selecting, financing and monitoring the most cost-effective projects in the pipelines. The Good Practices for Public Environmental Expenditure Management developed by the OECD provide guidance to set such rules and procedures, based on best international practices.

Debt swap financial facilities should be centers of “professional excellence”, to maintain creditors' trust and, eventually, attract additional finance (including additional debt swaps). Good governance and effective expenditure management can help to attract additional public and private finance.

CHAPTER 1. INTRODUCTION

The international debt crisis of the 1980s led to the introduction of the swap mechanism for conversion of debt owed to creditors by developing countries that were unable to service their external debt. Chile was the first country to establish an institutionalised debt equity swap programme in 1985. In this case, commercial debt owed by Chile to a private sector creditor was purchased by an investor in the secondary market and then converted into an equity investment in the country.

Over the past twenty years a whole range of different debt treatment operations have been developed. They all have their advantages and disadvantages and provide various opportunities but also may cause different risks. Both commercial debt and debt to official creditors can be swapped.

Early experience with debt swaps targeted at supporting nature projects is linked to commercial debt-for-nature swaps. The first debt-for-nature swap, arranged in Bolivia in 1987 as a type of a debt-for-development swap, was concluded between the government of Bolivia and *Conservation International (CI)*. Other swaps followed the same year in Costa Rica and Ecuador. This soon led to the introduction of a whole array of debt-for-development swaps in other sectors, such as: child development, education, health and environment.

Since then, the debt-for-environment swaps (DFES) have been used in low-income¹ countries to capitalise environmental trust funds or endowments². They have been common in those African countries that have been most severely affected by desertification. DFES have been also implemented in many Latin American countries (e.g., Argentina, Bolivia, Chile, Colombia, El Salvador, Jamaica, Uruguay) or more recently, in transition economies, such as Poland and Bulgaria.

Once considered new and innovative, debt swaps became a standard practice for debt managers in many developing countries over the past 20 years. It is estimated that since 1985 about 30 countries have benefited from DFES, which have generated over USD 1 billion in funding for the environment (See Annex I). In their first decade, the focus was on three-party debt swaps involving conversion of commercial debt or export credits.

With the introduction of the Paris Club debt swap clause in 1990, bilateral debt became eligible for swaps. Although debt-for-development and debt-for-nature swaps have not been an important source of debt reduction in developing countries compared to debt-for-equity swaps, these transactions have generated significant funding for development projects.

With the introduction of debt-for-environment swaps in Poland and Bulgaria, however, it has become possible to mobilise large amounts for environmental investments through debt swaps. This particular experience is in the focus of this report. Indeed, DFES can be an effective way to secure

¹ A country is classified as low-income if the gross national income per capita per year equals USD 905 or less (World Bank Global Development Finance database, June 2006). Of EECCA, 3 are classified as low-income countries: the Kyrgyz Republic, Tajikistan and Uzbekistan.

² An endowment fund is a fund which invests its capital and uses only the income earned on the investments to finance its activities.

public finance for environmentally-related investment projects, in countries where such commitments are fragile and challenged by strong budgetary pressure. Both Georgia and the Kyrgyz Republic present interesting cases where such a situation is encountered.

Until recently, debt owed to multilateral creditors has been excluded from swap operations because of the preferred creditor status of multilateral institutions. Recent international initiatives, such as the Heavily Indebted Poor Countries and the Multilateral Debt Relief Initiatives show significant changes in this regard.

Other countries in the world have vastly utilised the opportunities offered by DFES while the countries of Eastern Europe, Caucasus and Central Asia (EECCA) have been slow to pick up on this possibility. One possible explanation is related to the fact that EECCA started accumulating debt only in the early 1990s. After the break-up of the Soviet Union in 1991, Russia took over all outstanding debt of the former Soviet Union and all other EECCA entered the transition period with no debt whatsoever. However, already early in the process they accumulated significant external debt which soon reached unsustainable levels. Only, in the second half of the 1990s, did some EECCA begin to consider swapping debt as an option for mobilising additional resources for different social purposes in their countries, including the environment.

This report draws from experience with preparing and implementing DFES in the countries of Central and Eastern Europe, Caucasus and Central Asia. The main focus is on the practical experience of Poland and Bulgaria that have successfully implemented such swaps and on Georgia and the Kyrgyz Republic that have started the preparations of DFES. Each of these cases presents valuable lessons that other low-income countries can learn from.

In addition, the report focuses on the possibilities of swapping external public and publicly guaranteed long-term debt to official bilateral creditors, such as the members of the Paris Club. Debt owed to multilateral or private creditors is not considered in this report although issues related to this type of debt are touched upon, as relevant and appropriate.

The report is divided into three major chapters. Chapter 1 introduces the main issues related to DFES in the context of debt restructuring and with regard to other types of debt treatment operations. It discusses the major opportunities and risks inherent in debt-for-environment swaps. Chapter 2 presents the main steps in designing a DFES in preparation for negotiations with creditors. This includes issues related to the analysis of the country's debt structure, revenue forecasting and developing of expenditure programmes to be financed with resources generated from potential DFES. Chapter 3 presents the main governance issues related to the institutions managing DFES resources and the minimum conditions that need to be in place in order to ensure the credibility of the scheme.

CHAPTER 2. DEBT-FOR-ENVIRONMENT SWAPS IN THE CONTEXT OF DEBT RESTRUCTURING

Unlike the Central and Eastern European (CEE) countries which had accumulated most of their external debt before the political changes of the early 1990s, EECCA started the transition period with no debt whatsoever. This is so because as early as after 1991, the Russian Federation, as agreed with the creditors, offered the other EECCA to take over all official foreign liabilities of the former Soviet Union. Since then, however, the external debt of many EECCA has reached unsustainable levels. These dynamics at the beginning of the transition period were often caused by the collapse of the trade relations of these countries, negative terms of trade shocks, devaluation crises, the 1998 Russian crisis. In addition, fiscal reforms and growth revival took longer than expected and excessive optimism by multilateral investors contributed to the high debt levels.

In recent years, these countries have made a significant progress in alleviating their debt burden although with increasing divergence. Debt indicators have been favourably affected by a period of strong GDP and export growth across the region. Fiscal restraint has played a key role in debt containment. Debt relief has also played a major role in reducing debt burdens. Altogether however public and publicly-guaranteed external debt service in some of the poorest EECCA (Georgia, the Kyrgyz Republic, Moldova, Tajikistan) remains burdensome (see Table 1 in Chapter 3).

It is generally recognised that sustainable external debt is a precondition for macroeconomic stability. Many indebted countries have developed Debt Reduction Strategies which envisage significant economic and fiscal reforms as well as assume further debt restructuring of their external debt. Experience shows that credible commitment to such reforms remains an important, necessary condition for convincing creditors to give a debtor country a preferential debt treatment. Most of the transition economies have developed some experience with debt restructuring, either on a bilateral basis with individual creditors or through the Paris Club of creditor countries.

Box 1. What is the Paris Club?

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

The Paris Club has no legal basis or status. Agreements are reached following a number of rules and principles agreed upon by creditor countries. The Paris Club framework allows the treatment of the debt issue in a co-ordinated way.

There are 19 permanent members of the Paris Club. Other creditors are invited on a case-by-case basis. Any country that has granted government loans or credits guaranteed by the government or its official agencies to a debtor country which presents a request for a debt restructuring can attend a Paris Club meeting.

The outcome of the negotiation is not a legal agreement but an Agreed Minute signed by creditor countries which is a recommendation to their governments to sign bilateral agreements with the debtor country.

Source: www.clubdeparis.org

This chapter introduces DFES in the context of debt restructuring. It presents different debt treatment operations and discusses their respective advantages and disadvantages. It also points out to the major opportunities and risks related to DFES and explains what motivates both debtors and creditors to enter DFES arrangements. The chapter starts by introducing some international debt relief initiatives which create favourable conditions for further restructuring of external debt.

The international context for debt relief and debt restructuring

When a country faces difficulties with servicing its external debt, there are various transactions that the government can make to ensure that its financing needs and payment obligations are met at the lowest possible cost and in a risk-averse manner. These transactions include, among others, unconditional debt relief, rescheduling debt servicing, debt swaps, primary debt issues, secondary market operations. In all these, the main objective of the ministry of finance is to minimise the expected debt servicing costs and the cost of holding liquid assets, subject to an acceptable level of risk, over a medium to a long-term horizon.

In such situations, debt relief is the first and most preferred option for all debtor countries. In most cases, however, debt relief is usually available to the poorest countries in the world, such as those grouped under the Heavily Indebted Poor Countries (HIPC) Initiative. Requesting debt relief implies serious liquidity problems and negatively affects the credit rating of the country. Any future borrowing then comes at a higher cost. Therefore, if the ambition of a country is to continue to grow, attract investments and re-establish its international credit rating, debt relief is a less attractive option.

Box 2. The HIPC Initiative

The Heavily Indebted Poor Countries (HIPC) Initiative is a coordinated approach to debt reduction launched in 1996 by the International Monetary Fund (IMF) and the World Bank. The HIPC Initiative currently identifies 40 countries, most of them in Sub-Saharan Africa, as potentially eligible to receive debt relief. This debt relief is worth over USD 63 billion in 2005 net present value terms (NPV) if all creditors participate.

A country is eligible for HIPC assistance, if it faces an unsustainable debt burden, beyond available debt-relief mechanisms, implements IMF and World Bank-supported programmes and has developed a Poverty Reduction Strategy Paper (PRSP). If a country's external debt ratio, after traditional debt relief mechanisms, is above a threshold for the value of debt to exports (above 150%) or, in special cases, the value of debt to fiscal revenues is above the threshold of 250%, it qualifies for assistance under the Initiative.

The HIPC Initiative was enhanced in 1999 to provide deeper, more rapid relief to a wider group of countries, and to increase the Initiative's links with poverty reduction. By January 2007, 30 countries had benefited from HIPC debt relief, 22 having reached the completion point, at which debt relief becomes irrevocable. Eight more are receiving some debt relief and a further ten are potentially eligible for HIPC debt relief, pending the agreement of macroeconomic reforms, poverty reduction strategies, or arrears clearance plans.

Countries that qualify are: Benin, Bolivia, Burkina Faso, Burundi, Cameroon, Chad, Congo, Ivory Coast, Ethiopia, Gambia, Ghana, Guinea, Guinea-Bissau, Guyana, Honduras, Kenya, Madagascar, Malawi, Mali, Mauritania, Mozambique, Nicaragua, Niger, Rwanda, Sao Tome and Principe, Senegal, Sierra Leone, Tanzania, Uganda, Yemen, Zambia.

Source: www.imf.org

Of the EECCA countries, only the Kyrgyz Republic has expressed its wish to receive HIPC Initiative assistance. The rest of the EECCA countries (and the CEE countries for that matter) do not qualify for this Initiative. For some EECCA, debt forgiveness can also arise under the CIS-7 Initiative, *i.e.* the International Initiative to Promote Poverty Reduction, Growth and Debt Sustainability in Low-

Income Countries of the Commonwealth of Independent States (CIS – the former Soviet Union Republics, excluding the Baltic states). The major reason why some creditors have launched this initiative is to give the poorest debtors from the former Soviet Union immediate debt relief to boost their emerging market economies in a way that will allow them to pay their remaining debts in the future. This will most likely be the “first-and-last-chance” specific initiative for the region. Otherwise, creditors would create incentives for the former Soviet Union countries to resume uncontrolled borrowing, with the expectation that once their debt stocks become unsustainable again, their debt would be forgiven once again in the future. In economics, this situation is known as a “moral hazard problem”³, and creditors always try to avoid it.

Box 3. The CIS-7 Initiative

The CIS-7 Initiative is a common framework for seven low-income countries of the CIS – Armenia, Azerbaijan, Georgia, the Kyrgyz Republic, Moldova, Tajikistan and Uzbekistan – to accelerate poverty reduction and economic growth, while ensuring sustainable fiscal and external debt positions. The initiative was launched in 2002. The role of Initiative participants is to extend support to those countries implementing significant reforms. Assistance could take the form of:

- More concessional financial support, and debt restructuring or relief where needed, in conjunction with strong reform programmes;
- Increased access for CIS-7 countries to industrial countries’ markets and promotion of Foreign Direct Investment (FDI);
- Improved coordination between development agencies;
- Support through technical assistance, policy advice, and concessional financial assistance (including grants) in support of the reform efforts.

In addition, bilateral debt restructuring or debt relief should rely on existing frameworks, such as the Paris Club.

Source: www.imf.org

In 2006, following the 2005 Gleneagles Summit of the G-8 group of nations, the World Bank joined the IMF and the African Development Fund in implementing the Multilateral Debt Relief Initiative (MDRI), forgiving 100 percent of eligible outstanding debt owed to these three institutions by all HIPC countries reaching the completion point⁴ of the HIPC Initiative. The initiative is intended to help these countries to advance toward the United Nations’ Millennium Development Goals (MDGs). The MDRI is expected to double the volume of debt relief already expected from the enhanced HIPC Initiative. Debt cancellation under the MDRI will be in addition to debt relief already committed under the HIPC Initiative. Unlike the HIPC Initiative, the MDRI does not propose any parallel debt relief on the part of official bilateral or private creditors, or of multilateral institutions beyond the IMF, World Bank, and the African Development Fund. However, in early 2007, the Inter-American Development Bank also decided to provide similar debt relief to the five HIPCs in the Western hemisphere. Although the MDRI is an initiative common to several international financial institutions (IFIs), the decision to grant debt relief is ultimately the separate responsibility of each institution, and the approach to coverage and implementation may vary. Of the EECCA, apart from the

³ In economics and ethical theory, the term moral hazard is used for any situation in which a person or an organisation does not bear the full adverse consequences of its actions.

⁴ To reach the completion point, a country must maintain macroeconomic stability under an IMF Poverty Reduction Growth Facility-supported programme and satisfactorily carry out the key structural and social reforms in its poverty reduction strategy. The amount of debt relief then becomes permanent.

Kyrgyz Republic, Tajikistan is the only other (non-HIPC) country that qualifies for this initiative as it meets the IMF criterion for countries with per capita income below USD 380.

In addition, several developed countries have established special programmes for debt reduction on the basis of debt swaps in different poor countries in the world. Debtor countries' chances for debt conversions increase where creditor countries have established bilateral debt conversion programmes. These programmes generally offer significant debt reduction and greater investment in various social sectors. Annex II provides an overview of selected donor debt reduction programmes.

Box 4. Kyrgyz experience with debt restructuring, debt relief and DFES

The devaluation crisis experienced by the Kyrgyz Republic in the middle of 1996 (by almost 50%) led to an abrupt increase in public debt. The consequence was an agreement signed with the Russian Federation on debt restructuring. The situation was complicated again by the Russian crisis of 1998. In 2002, there was an agreement with Paris Club creditors resulting in a non-concessional flow rescheduling with the possibility of conducting debt swaps. Following the agreement with the Paris Club, the Kyrgyz authorities successfully completed negotiations with essentially all bilateral creditors on terms comparable to those of the Paris Club. While these agreements significantly lowered the Kyrgyz debt service obligations, the debt stock remained high. Therefore, in March 2005, a debt stock reduction agreement was signed with Paris Club creditors. It brought significant debt relief, however continued fiscal adjustment is critical for maintaining macroeconomic stability. Most recently, the Kyrgyz Republic has expressed its interest to receive HIPC Initiative assistance.

The clause on debt swaps, included in the 2002 agreement with the Paris Club, opened a window of opportunity for the Kyrgyz Republic. Following the Paris Club agreement, at the initiative of the Ministry of Ecology and Emergencies, the Kyrgyz Government established an inter-ministerial working group to discuss and develop modalities for utilising the opportunity presented by the debt-for-environment swap. There is also an opportunity for the Kyrgyz Republic to link the debt-for-environment swap initiative with the existing CIS-7 Initiative. The Kyrgyz Government is also trying to advance and link the DFES idea to a UN initiative on Poor Mountainous countries.

In addition, the Ministry of Ecology and Emergencies requested the OECD to assist in establishing a framework for bilateral negotiations of debt-for-environment swaps with creditors. The "Pre-feasibility Analysis, Project Pipelines and Institutional Support for Debt-for-Environment Swap in the Kyrgyz Republic" was completed at the end of 2005. In the meantime, the Kyrgyz Government is holding discussions with Germany on implementing a DFES scheme.

DFES in debt reduction strategies

For a debtor country facing problems with servicing its debt obligations, unconditional debt relief is better than swaps with some "strings" attached to them. Avoided debt service payments could be used by a debtor country for any priority purposes, including environment, if the country chooses to do so. Hence, a rational debtor might hesitate to negotiate a swap, as long as there is an opportunity for an unconditional debt reduction or generous rescheduling of payments. On the other hand, debt swaps are usually more attractive to creditors than the unconditional cancellation of debt as they can recuperate some portion of the economic value of their loans by attaching conditionalities to debt relief. Debt-for-environment swaps are obviously attractive to the ministries in charge of environment as well. For the ministries of finance, however, the most important consideration is whether the debt swap will reduce the burden of debt servicing in a cost-effective way.

In choosing the best strategy to reduce its debt burden, a debtor country may not want to rule out the possibility of debt restructuring operations in the future. Therefore, it is important to ensure that swapping debt for environment will not limit future opportunities of debt relief or rescheduling. Thus, some future debt rescheduling or relief might be hindered, if a debt swap is already in place against a

particular credit. Experience shows (See Box 9 on Poland) that it is important that the DFES scheme be well prepared in parallel to negotiations of the unconditional debt reduction and be put on the table immediately after the unconditional relief agreement has been reached. Missing this chance could decrease the probability of swaps in the future because after the debt relief agreement has been concluded, creditors may be reluctant to open new negotiations on debt issues. If proposed, the DFES should be clearly additional to any unconditional debt relief that may be expected under the CIS-7 or other existing initiatives. Experience shows that the best results are achieved when discussions on debt-for-environment swaps are fully integrated into strategic negotiations on long-term approaches to debt treatment.

Possible debt swap operations

The international community has long recognised the potential of debt swap operations for raising capital in low-income countries. As such, debt swaps have received particular attention over the past 20 years. The economic rationale of debt swaps is based on the willingness of creditors to accept less than the face value⁵ of debts and of the debtor government to make payments at a price higher than the reduction agreed by the creditor in exchange for cancellation of the debt.

Box 5. What is a debt-for-environment swap?

A **debt swap** (or conversion) is defined as the cancellation of (part of the) external debt of a country in exchange for the debtor government's commitment to mobilise domestic resources (local currency or another asset, such as bonds, privatised public assets) for an agreed purpose on agreed terms. The cancellation of external debt usually comes at a discount from the face value. The terms debt swap, conversion, and exchange are often used interchangeably.

The main idea underlying a **debt-for-environment swap** is that instead of continuing to make external payments on outstanding loans in hard currency, a debtor country makes payments in local currency to environmental projects in the country on terms agreed upon with creditors.

The amount of local currency may or may not reflect a discount⁶, relative to the present face value of the original debt, and this discount can be subject to negotiations between the two countries. Another variable that needs to be negotiated is the exchange rate at which local currency payments are made, a schedule of payments (one-time transfer or instalments as repayments are due), and the mode of payment (e.g., cash, government bonds or in-kind contributions). All these variables determine the rate of debt forgiveness, or relief, embedded in a transaction.

⁵ Face value is the original amount of a loan owed under a loan or other credit agreement, prior to debt restructuring. Also referred to as the nominal value of debt.

⁶ The discount from the face value of debt is the percentage of reduction from the original amount of loan owned under a loan or other credit agreement prior to debt rescheduling or reduction.

Box 6. Debt swap terms

When negotiating a debt swap, a debt swap agreement should as a minimum seek to clarify the following terms:

- Amount and type of debt to be swapped;
- Conversion rate – the share of the debt owed to a creditor that can be swapped for agreed purposes;
- Redemption price (the price in percentage terms at which debt is converted into another asset);
- Form the debt swap proceeds will take (e.g., cash, bonds, etc.);
- Applicable exchange rate;
- Debtor government debt treatment or commissions;
- Schedule and procedures for debtor government payment;
- Legal documentation required;
- Terms (programmes) for the use of debt swap revenues;
- Procedures for debtor government monitoring of compliance with the debt swap terms (e.g. quarterly reports of expenditure).

Experience shows that a debt swap transaction is **feasible** if:

- A creditor is willing to donate or sell debt at a discount from face value. The debt must be available and eligible for conversion. The creditor is willing to do this, if the benefits of reducing debt through debt swap outweigh the benefits of waiting for future repayment. In order to swap debt, the creditor government should recognise the positive development impact of debt relief combined with increased social or environmental investments. In the case of commercial creditors or government export agencies, their primary motivation is based on the desire to recover some debt that they perceive as unlikely to be repaid at full face value.
- A debtor government is interested in and able to provide local currency or another commitment in support for development, including environment. The intention of a debtor government is to retire its debt at the highest possible discount from face value. The debtor government has to appreciate the positive impact of debt reduction at low cost combined with increased investment in priority sectors. Another motivation may be the scarcity of foreign exchange reserves – in case of a debt swap, the payment is made in local currency. In order for a debt swap to be realised, the debtor government has to perceive the benefits of a swap as more advantageous than future debt relief that may be obtained through debt rescheduling agreements.

Some of the potential **advantages** of debt swaps are (after Moye, 2001):

- Debt swaps retire debt at a discount from face value. The government chooses a debt swap operation only when repayment terms for debt conversion are more favourable than anticipated renegotiated terms;
- By reducing debt service payments in foreign currency debt swaps can have a positive impact on a country's balance of payments;
- Debt swaps may favour investment in priority sectors which are defined by the government;

- Debt swaps may be used as an incentive to encourage privatisation or to facilitate the return of flight capital by their nationals;
- Debt swaps may increase funding for development programmes. In many countries, debt swaps have stimulated the creation of local currency environmental funding mechanisms that have often been new to these countries. Debt swaps lead to greater participation by civil society, including non-governmental organisations (NGOs), in implementing development projects;
- Initial capital granted through debt swaps can also be used to attract matching contributions from other donors. In the case of the Mexican debt-for-nature swap, the GEF made a major contribution to a protected area. Debtor governments usually try to estimate the degree of additionality offered by debt swap operations by determining the likelihood of the foreign investment or development assistance entering the country in the absence of debt conversion.

Some of the **disadvantages** related to debt swaps are:

- Lack of fiscal resources to make a prepayment may be a constraint to debt swap operations. Hence, some co-financing may be also necessary. Experience shows that the budgetary impact can be managed, if payments are spread smoothly over time;
- Debt swaps means injection of excessive amounts of local currency into the economy that may result in inflation. In order to mitigate inflationary impact, debtor governments may structure payments in instalments or bonds. By issuing securities in local currency, the government is able to contain any potential inflationary impact of the swap. Debt-for-equity swap has no adverse monetary impact;
- Debt swap transactions are time-consuming and complex, usually requiring the use of specialised advisors which increases the cost of the operations;
- There is a risk of corruption and round-tripping (investors transferring local currency generated through conversion out of the debtor country for illegal gain). In order to limit these risks strict reporting requirements should be put in place.

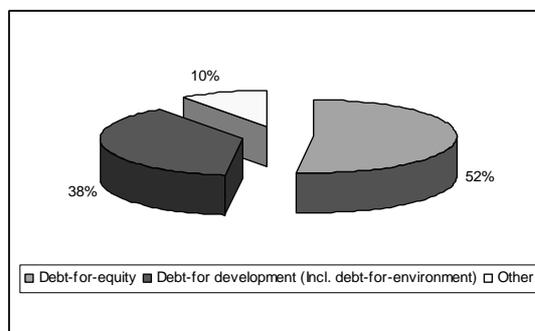
The framework Paris Club agreement usually contains a standard clause on debt swaps. This allows creditors to implement local currency debt swaps on a voluntary and bilateral basis with a debtor country. These restrictions apply in order to preserve comparability of treatment and solidarity among creditors. The amounts of debt swaps that can be obtained are capped at a certain percentage of the claims of individual creditors.

There are several major debt swap transactions:

- **Debt-for-aid (development)** swap – the cancellation of external debt in exchange for local currency paid for development projects (e.g. health, education) in the debtor country;
- **Debt-for-equity** swap – the cancellation of external debt in exchange for local currency invested in equity (shares) in a domestic firm or a privatised public enterprise but also in natural resource stocks;
- **Debt-for-nature (environment)** swap – the cancellation of external debt in exchange for local currency used to finance conservation (“green”), *i.e.* preservation of biological

diversity or environmental protection (“brown”) projects, *i.e.* pollution abatement, development of environmentally-related infrastructure. Debt-for-environment swaps can also be designed to alleviate poverty and foster economic development.

Chart 1. Debt swaps by type, end 2000



Source: World Bank (2003).

Debt-for-equity swaps

Debt-for equity swaps are the most attractive swap instrument from the point of view of creditors. The crucial difference between debt-for-equity and other debt swaps considered here is that under this scheme the creditor can recapture more of its assets. It is therefore no surprise that more than 50% of all debt conversions world-wide have been swaps for equity. Debt-for-equity swaps have been quite successful in solving some of the liquidity problems in a number of Latin American countries. Debt-for-equity swaps are often preferred by creditor governments as *ad hoc* measures to compensate their domestic financial institutions affected by debt conversion. Some creditors also use this instrument to take over strategic assets in debtor countries, e.g., energy infrastructure or strategic industrial sectors.

A debt-for-equity swap would be attractive to creditors strictly on financial terms if the value of the swap was smaller or equal to the market value of the equity. Market value, in turn, is equal to the risk-adjusted present (discounted) value of the future flow, net of tax profits from the assets acquired through a swap.

Unlike a foreign firm, which is interested exclusively in financial returns, some creditor governments are also interested in environmental and social benefits that cannot be captured in monetary terms by a private investor. If this is the case, a creditor government might be willing to accept a swap value that is larger than the market value of equity. The difference would be the actual debt relief or the price that the foreign government would pay for producing local social and environmental benefits, some of which are transboundary or global. The market value of environmental assets must, however, be greater than zero. Otherwise, no foreign firm would be willing to accept the assets, even free of charge.

For the same reasons, a low-income country would benefit from swapping debt for assets that would not have found buyers otherwise, *i.e.* those whose market value is zero. Swapping debt for assets that have a positive market value would not always yield benefits to the low-income country. Selling assets on the market, through competitive sale is likely to yield more revenue than swapping these assets for debt reduction with a single creditor under a very limited competition. Unless the creditor buys assets through competitive bidding (a rather unlikely arrangement under the swap), the purchase price is likely to be lower than the market value (Zylicz, 1998).

A transaction beneficial to a low-income country on economic grounds is unlikely to attract creditors' interest, unless the assets in question yield some non-market services of a public goods character that a creditor government is interested in. Therefore, the optimum strategy for the debtor country would be to sell on the market any asset which has financial value and swap the debt for the economic value of non-market services. These non-market services may include services provided by improved environmental assets (water, air, soil), such as the reduction of premature mortality and morbidity, flood protection or support of sustainable agricultural and forest output.

In addition, debt-for-equity swaps cannot contribute to capacity building in the debtor country as much as the more long-term and comprehensive approaches offered by the debt-for-development and debt-for-environment swaps discussed below.

Debt-for-aid swaps

Debt-for-aid (often also called debt-for-development) swaps offer creditors an attractive opportunity of swapping the debt without a significant net additional flow of financial resources to the debtor country. These can include: debt-for child development, debt-for-health, debt-for-education swaps. Debt-for-aid often means financial transfers between various agencies within the creditor country government, *i.e.* outstanding receivables on foreign official loans are financed by decreasing, or not increasing, the foreign aid budget. Such swaps would reduce the budget available for other official assistance programmes, and for this reason can be more easily accepted by the creditor country government.

Debt-for-aid may be attractive for creditors as a transparent transaction and usually one-time only financial transfer. Managing related expenditure can be easily incorporated into an established programming framework of bilateral official development co-operation agreements. This gives creditors direct control over disbursement and enables a partial recuperation of financial benefits through a reduction of the baseline aid budget and through tied procurement (swapped debt used to purchase goods and services from the creditor/donor country).

For the same reasons, the debtor country may find debt-for-aid swap less beneficial. From the debtor country's perspective, the major question is the value added that such a transaction would provide compared to the aid-as-usual scenario. A legitimate expectation of the debtor country would be that debt-for-aid should not substitute for the baseline official development assistance but would mobilise "new" and "additional" resources. Unfortunately, such an expectation would most likely be difficult to meet if debt were swapped for aid. Even if it may not affect already committed bilateral assistance, it is very likely that such a swap would influence the allocation of foreign assistance budgets in the future.

Debt-for-aid swap could in principle be used for environment and development purposes. However, as described earlier, such a transaction is usually a one-time transfer as opposed to diverting the debt repayment flows over a longer period of time. The commitment periods of official assistance budgets are not longer than one to two years. Indicative programming may sometimes stretch up to three years, but not more. Because of its short term, the value of the transactions cannot be very large. This is so because if a significant amount of future liabilities is swapped for domestic expenditure on aid over the maximum period of two to three years, this could be fiscally impossible for the debtor country government and could distort its foreign exchange regime. A government can bypass this constraint by issuing bonds to raise the necessary amount of resources up-front and smooth payments to the scheme over a longer period of time. Such an action would also "sterilise" potential distortions to monetary policy, which could be caused by pumping large amounts of domestic currency into the economy in a short period of time. But this would involve the additional cost of bond issuance and

servicing. It would also compromise the sovereign borrowing capacity, hence this may not be a feasible option for the debtor country in the short to medium term.

As international experience shows, debt-for-environment swaps can be designed so as to mitigate these problems and to redirect many more resources to the local economy in a way that does not create macroeconomic distortions and does not affect creditworthiness. Moreover, the expenditure programme that will be financed under a potential debt-for-environment swap can be made fully compatible with the objectives of official aid programmes. Environment and development goals are often synergistic.

Debt-for-environment swaps

DFES can bring multiple benefits: creditors can be relieved of an asset that might never be repaid in full, and debtors can reduce the external debt burden without drawing down scarce foreign reserves and may even gain considerable debt relief as well as secure a long-term financing for environmental projects (GEF, 2002).

A debt-for-environment swap is among the very few mechanisms that can provide sustainable support for local economic development and at the same time mobilise domestic spending to protect purely public and common goods (such as biodiversity) or pure externalities (such as transboundary or global pollution) in low-income countries. These basic goods and services that nature provides are the essential basis for subsistence, social welfare and sustainable growth of local communities. They are also common global assets that sustain life on earth and determine the future growth of the world economy, as recognised by numerous international environmental conventions and treaties. The tragedy of common goods, such as most services provided by pristine nature, stems from the fact that they can yield only limited cash revenue to their owners or users. Therefore, they are bound to be depleted (many irreversibly), because of the inability for owners and users to co-operate. This depletion is exacerbated by the immediate pressure of poverty and the need for cash (e.g., in order to service foreign debt).

Box 7. Links between debt, environment and poverty

The high level of external debt service has several effects on the environment. *First*, debt service diverts public spending away from domestic expenditure, and environment is often the easiest victim of budget cuts, due to its public goods character and the lack of strong interest groups behind its protection. *Second*, the need for obtaining foreign currencies through increased exports exerts additional pressure on the unsustainable extraction of natural resources (e.g., timber, gold, minerals, metal scrap, etc.), which are often the major source of a debtor country's foreign currency earnings. *Third*, debt service reduces imports, which in turn increases the immediate demand for domestic resource substitutes. The degradation of environmental resources under debt pressure is particularly aggravated by the high level of poverty in an indebted country. In most cases, it is the poorest sections of the population that are forced to pursue an unsustainable use of natural resources (e.g., forests, fish and wild animals stock, etc.) to meet their daily survival needs. In the medium and long term, the unsustainable use of natural resources degrades the most easily accessible and essential assets, on which poor communities depend.

A debt-for-environment swap can be used to finance "green" public goods (nature reserves, sustainable tourism or sustainable agricultural practices) or the abatement of industrial pollution externalities – the so-called "brown" projects (improving energy efficiency, reducing pollution from the power and district heating sectors or in selected industrial facilities). Debt-for-environment swaps can also be used to finance development of collective environmental infrastructure, such as wastewater collection and treatment systems, handling of accumulated toxic waste. In particular, development

objectives can be facilitated by financing access of the poor to essential infrastructure services, such as water supply and sanitation, energy. Many services of such infrastructure can also yield transboundary or global benefits. In the absence of financial incentives, a low-income country usually cannot realistically be expected to finance the full costs of such projects, which partly benefit downstream or downwind countries. By the same token, immediate and local needs of a low-income country usually crowd out projects that would generate purely global returns, such as the prevention of climate change, protection of international waters or biological diversity which can in turn contribute to security and piece in the region.

Box 8. DFES - major opportunities

- Current international context favourable to debt reduction mechanisms
- Can raise more money for environment than other debt swaps – e.g. Poland
- Can contribute to poverty alleviation by facilitating local growth and creating more jobs
- Can contribute to peace and security in the region
- Can help attract co-financing from other sources
- Can help build local institutional capacity in managing public environmental expenditure in accordance with international good practices

The majority of such projects would also yield important economic benefits to poor local communities, which depend on environmental goods and services for subsistence and sustainable growth. For example, treating discharges of wastewater from the coastal villages in Georgia that go into the Black Sea would not only prevent eutrophication of this sensitive water reservoir, but would also help increase the attractiveness of the area for tourists. Harvesting local renewable energy sources, such as rivers or biomass, would not only benefit the global climate, but could also provide access to cheap and sustainable energy for the local communities, which do not have access to or cannot afford electricity and heat produced from imported fossil fuels. Therefore, debt-for-environment swaps can be viewed as a mechanism which blends local and foreign financing to implement projects that support local economic development and poverty reduction that otherwise would not have been funded because of their public goods character, or because their benefits are shared by many countries.

In addition, experience shows that DFES can generate significant resources. To date, the largest environmental swap involving conversion of bilateral debt has been concluded by Poland. Through this debt treatment instrument, Poland alone succeeded in raising more money for environmental projects than all other debt-for-nature swaps worldwide (see Annex 1 for more information). The institution established to manage these resources, the Polish EcoFund, has been internationally-recognised for its well-designed programmes and robust expenditure management practices. As a result, several donors have provided additional grants to the Polish EcoFund. The Polish EcoFund has been particularly successful in leveraging resources from other domestic public and private sources. The Fund has also helped develop local capacity in project preparation. Thus, unlike all other swap instruments, DFES contribute to building sustainable local institutions for appraising and managing portfolios of environmental projects.

Box 9. DFES and unconditional debt relief: the case of Poland

Before 1991, the Polish government was negotiating with the Paris Club an extensive package for rescheduling its post-communist debt. The rescheduling package included up to 50% of debt relief offered by most creditors to Poland, with the recognition of the pioneering role that Poland was playing in driving radical market and democratic reforms in the post-communist block of Eastern Europe. It was obvious to all parties that this was a unique opportunity for unconditional debt relief.

The debt-for-environment swap initiative was carefully prepared in parallel to these negotiations, but launched only after the extent of negotiated rescheduling and unconditional debt reduction was perceived as final⁷. As a result, Paris Club creditors agreed to create an opportunity for additional bilateral debt swaps of up to 10% of the value of the original debt (i.e. 20% of the remaining debt). The USA used this opportunity almost immediately, agreeing to swap the allowed maximum, that is, 10% of its debt. In order to avoid fiscal bottlenecks, the transaction did not include a one-off swap of the entire debt stock. Instead, the Polish government promised to transfer every year an agreed percentage of the debt repayments due – in national currency – to a local financing facility, the EcoFund, which was established to manage project pipelines.

Over the years, the EcoFund has facilitated five additional swaps from other creditors, each on slightly different terms. Altogether, the Polish DFES scheme has generated an unprecedented amount of over half a billion USD – more than all other debt-for-environment and debt-for-nature swaps in the world taken together. Due to its outstanding performance and very solid expenditure programmes, the EcoFund has also attracted additional multimillion donor grants for environmental purposes.

DFES are not without risks, however. Some of these **risks** include:

- downgrade of the country's credit rating which may lead to the increase of the cost of future borrowing;
- distorting negotiations on more efficient debt treatment operations (restructuring and relief);
- macro-economic and political instability which can lead to the lack of confidence by creditors;
- inflationary impacts caused by the injection of excessive amounts of local currency into the national economy;
- fiscal difficulties that can lead to the lack of resources to service the swap at a national level;
- using DFES as an argument to reduce regular government environmental expenditure;
- inefficient public management of debt swap funds and round-tripping caused by the lack of adequate monitoring of expenditure.

⁷ Zylicz, Tomasz (1998).

Box 10. Fiscal capacity to service debt swaps and macroeconomic risks

Debt-for-environment swaps involve contractual obligations to pay. A debtor country would have to demonstrate a credible fiscal capacity to fulfil these obligations and service debt swaps. This would require legal, institutional and political guarantees that the appropriate allocations will be included in the future state budgets and that these allocations will be used for agreed purposes. The country would also have to convince creditors that it will consistently implement economic reforms and strengthen the fiscal position of the public sector.

The Senegal debt swap undertaken in 1993 with a third-party participation of UNICEF (for more information on third-party participation, see Chapter 4) shows the importance of macroeconomic risks for the success of debt swap arrangements. With the assistance of the ING Bank, UNICEF purchased USD 24 million face value of bilateral debt owed by Senegal to Argentina for a purchase price of USD 6 million (25% of face value). The Government of Senegal agreed to pay UNICEF the equivalent of USD 11 million over three years to support UNICEF projects in Senegal related to development (education, health, water supply and sanitation projects). The payment had to be made in domestic currency. However, one month after the debt swap agreement was signed, the local currency devalued by 50%, doubling the Government obligation. Subsequently, the Government and UNICEF agreed to re-negotiate the terms of the transaction. The objective was to balance between the budgetary impact of increased payments in local currency and the need to provide sufficient financing of the programmes.

As experience shows, DFES can be beneficial for both the debtor country and the creditor. For *the debtor country*, swapping debt for environment is an attractive option for a number of reasons:

- It provides new and additional local currency expenditure that does not replace other public spending.
- It can leverage additional local expenditure on environmental public goods that are highly important as the foundations of the country's sustainable development, but are typically not urgent because of the immediate pressures to provide food and security to poor people, even if this undermines the long-term, sustainable basis for local food supply.
- It offers opportunities to integrate environmental quality improvements with poverty reduction, social well-being and economic recovery through protecting public health, creating new jobs and harvesting local resources and skills to generate sustainable revenues to local communities.
- It provides a unique opportunity to move towards the fulfilment of international environmental agreements (such as the Climate Change Convention, the Convention on Biological Diversity).
- It can contribute to the alleviation of regional and cross-border conflicts related to the management of transboundary natural resources (e.g., surface waters, forests).
- It is a practical and effective instrument to mainstream the environment in the social and economic growth agenda of the debtor government. As Polish experience has shown, by raising environmental issues at the debtor country's government forum, swap negotiations, elevate the status of environmental departments, and make them partners with financial and industrial agencies.

- If properly designed, DFES can contribute to the improvement of the institutional capacity to develop and implement result-oriented environmental programmes, to prepare projects and to manage public expenditure in a transparent, accountable and efficient manner.

For creditors, a debt-for-environment swap has a number of attractive characteristics:

- For creditors that are concerned with global environmental problems (climate change, biodiversity), a DFES offers an opportunity to "purchase" global environmental benefits more cheaply than at home. This benefit is proportional to the scale of potential global benefits that can be produced in the debtor country (e.g., the potential reduction of emissions of greenhouse gases, the size of potential carbon sinks, and the size and diversity of endemic natural ecosystems).
- For creditors concerned with international security, a debt-for-environment swap offers an opportunity to foster cross-border co-operation and confidence building between (potentially) antagonistic countries. Such measures may include protecting common natural biological resources, (e.g., nature reserves, endangered species, rivers or lakes). A debt-for-environment swap can also help uproot sources of international/regional conflicts, (e.g., by improving the management of water resources in trans-national rivers or by reducing pollution loads that affect the quality of life in neighbouring countries).
- For creditors concerned with poverty reduction, a debt-for-environment swap offers various win-win opportunities to eradicate poverty while enhancing environmental sustainability. In low-income countries, such as the Kyrgyz Republic, a large share of the population depends heavily on natural ecosystems for daily subsistence. Sustainable management of natural resources, such as water, soil, forests, is a solid source of food, energy and income to many local communities.
- A debt-for-environment swap may also have a positive effect on a creditor country's environmental and political image in light of the increasing political promotion of debt forgiveness to the poorest countries and global co-operation for environmental protection.

Major lessons learned

Debt-for-environment swaps have a number of advantages over alternatives, such as debt-for-aid and debt-for-equity swaps. Debt-for-environment swaps can be designed as effective swaps for poverty eradication and sustainable development. This could be done by developing an expenditure programme that addresses international/regional and global common goods while eradicating local poverty, improving regional security, enhancing infrastructure for the poor and strengthening the environmental foundations of sustainable development.

Some of the main lessons learnt from the experience with preparing DFES in the context of overall debt restructuring and long-term and comprehensive treatment of debt are:

- Credible commitment to economic and fiscal reforms is an important and necessary condition to convince creditors to give a debtor country a preferential debt treatment. The need to maintain a sound macroeconomic position to ensure future growth and investment to pursue sustainable borrowing is key.
- The DFES should not be proposed if the overall macroeconomic situation in the country is improving and the external debt level is not unsustainable (by IMF criteria) as it affects the

credit rating position of the country and will increase the cost of future borrowings. DFES should be designed as part of the country's overall debt management strategy integrated into strategic negotiations on long-term approaches to debt treatment.

- A debtor country should utilise the momentum of existing international processes that call for debt cancellation/reduction and should seek to link the DFES to such processes (e.g. the CIS-7 initiative for EECCA countries).
- Best results are achieved when DFES are realised within the framework of negotiations with Paris Club creditors. It is particularly important that the agreement between the debtor country and the Paris Club contains an explicit clause which allows creditors to undertake, on a voluntary and bilateral basis, individual debt swaps with the debtor country, including DFES. Such a clause significantly facilitates the process and creates a window of opportunity for the debtor country to approach creditors with requests for them to consider DFES.
- DFES should not limit the opportunities for unconditional debt relief or restructuring in the future, as unconditional relief is always better for a debtor country than conditional swaps. However, DFES should be proposed immediately after unconditional relief has been exhausted (an additional "sweetener") and should be prepared early in the process. Therefore, timing is crucial.

CHAPTER 3. KEY STEPS IN PREPARING A DEBT-FOR-ENVIRONMENT SWAP

Once a debtor government has decided to pursue a DFES arrangement, it needs to get prepared for the negotiations with creditors. DFES are usually complex and time-consuming to design and implement. Most importantly, they require excellent collaboration between the ministries of finance and environment but also the support of the entire government. The ministry of finance has a crucial role to play in this process, as a lead agency in the negotiations with creditors.

A well-designed DFES scheme requires an in-depth analysis of the debt profile and debt sustainability of the debtor country in order to obtain realistic estimates of the revenue flows that can be expected to be generated from the swap and ensure that the country will have sufficient resources to make the payments. In addition, the ministry of environment needs to prepare a credible expenditure programme that can be financed by future DFES resources and identify potential project pipelines for the programme. Going to the negotiation table with a well-prepared and carefully thought over strategy increases the debtor country's chances for success. These and other related issues are the focus of this chapter.

Intragovernmental approach

Experience shows that a number of EECCA countries have been interested in and potentially eligible for DFES. However, until now, few have undertaken any serious steps in initiating a real dialogue on this issue within the government or testing the idea on potentially interested creditors. Most often, it is the ministries of environment that launch the process. This was the case of both Georgia and the Kyrgyz Republic, and earlier of Poland. Moldova and Ukraine, for example, raised this issue in the past but for various reasons they made no progress with pushing this idea further. Ministries of environment, however, should not announce plans for a DFES without prior consultations and agreement with the ministry of finance and other relevant agencies within the government.

While ministries of finance are concerned with finding a solution to the external debt problems, DFES are rarely an immediate option in the negotiations with creditors. Ministries of finance often find it difficult to understand the environmental problems and the benefits the country can obtain from supporting environmental investments financed through a DFES. Therefore, ministries of environment have a crucial role to play in building the case for a DFES by emphasising the broader economic and social gains for the society. While environmental concerns can effectively be dealt with under a debt-for-development swap, it is often the case that such a swap will try to pursue many different objectives and as a result the share available for environment may be negligible. This is the reason why, ministries of environment need to argue in favour of a clear-cut DFES. Often the real challenge is to convince its own ministry of finance rather than creditors that pursuing a DFES is worthwhile. Therefore, helping ministries of finance to understand the benefits from a DFES is of utmost importance in this process.

The Polish case shows the importance of a strong political leadership that drives the process. The Polish Minister of Environment at that time had managed to put a strong team of experts who developed a very convincing strategy which included a proposal of possible priority areas for

financing as well as a plan for establishing a local financing facility to manage the potential expenditure programmes. After convincing the Ministry of Finance and the rest of the Cabinet, the Polish Government presented the case to relevant creditors. In order to reinforce the Polish initiative, the then Polish Prime Minister approached Ms Gro Harlem Brundtland, the Prime Minister of Norway, who has earned worldwide acclaim in environmental matters, for her support. The Polish Interim Committee, established to coordinate this work – in close collaboration with representatives of the Norwegian Government and with the assistance of Coopers&Lybrand, a British consulting firm, drafted a comprehensive Concept Paper explaining the main points of the proposed solution. Then a special meeting of the ambassadors of the Paris Club countries was convened in Warsaw where the Prime Minister presented the Concept paper. Thus, he officially launched the initiative to coordinate prospective bilateral swaps. Several weeks later, on July 1, 1991, the Government of Norway hosted a major international conference in Oslo where the Polish initiative was discussed in greater detail.

Although Poland had the possibility to negotiate different debt swaps within the framework of the Paris Club agreement with creditors, it was the Polish Government's decision to insist that only DFES would be requested while some creditors expected debt-for-equity swaps, too. This experience shows the need for collaborative efforts, support at the highest political level and consistency in presenting and defending the choice.

In addition, creditors also need to be convinced that debtor government commitments will last and that the policy and institutional framework will remain stable over the time of the DFES implementation. In this sense, changes in the government should not affect agreements on rules and conditions achieved with creditors. This is particularly important given that the preparatory process may be lengthy – it may take between two and four years to conclude a deal. The Polish experience is also telling in this respect. The institutional framework was stable and "politics-proofed" for more than 10 years and it was impossible to influence the EcoFund unless two ministers colluded (environment and finance, later replaced by the Treasury).

Support at the highest political level coupled with credible commitment to economic and governance reforms, allowed Poland to gain the interest and trust of creditors. As a result, Poland succeeded to sign DFES agreements with six creditors and became the largest environmental swap to date involving the conversion of bilateral debt. The Polish case shows how the concerted efforts of the whole government and a smart negotiation strategy, combined with a very attractive expenditure programme, well-designed transaction and sound DFES financial facility, can bring spectacular results. The Polish case also points to the importance of lasting government commitments.

Analysis of the debt profile and DFES revenue forecast

The first practical step in deciding whether or not to pursue a DFES is to analyse the external debt profile of the country. This is important as not all external debt is eligible for swaps. DFES are most successful when arranged as part of the restructuring process within the Paris Club framework. The Paris Club debt is classified as official debt – borrowed from foreign governments or from state institutions with sovereign guarantees. The analysis should as a minimum include:

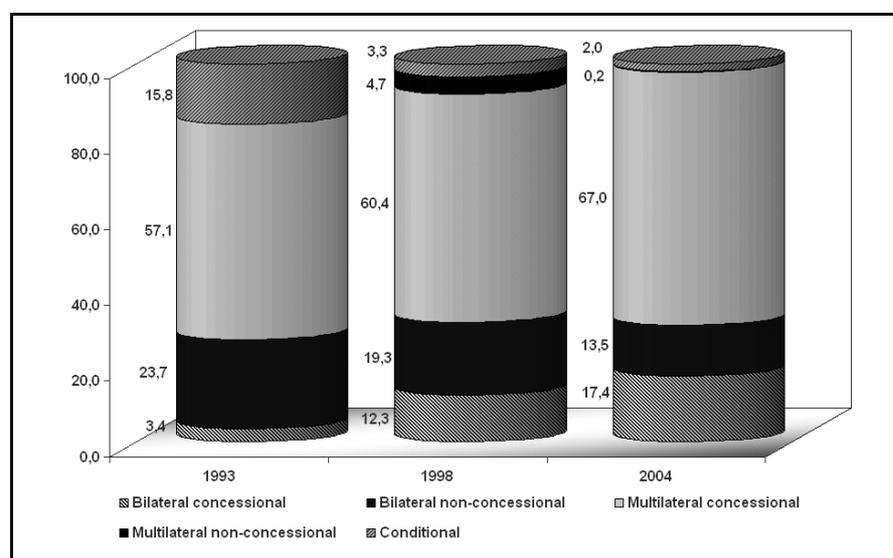
- analysis of the debt profile, debt sustainability and repayment schedule (principal and interest);
- careful identification of priority creditors for bilateral DFES negotiations and creditors' track record regarding debt swaps and DFES, in particular;

- analysis of alternative scenarios for potential DFES revenue under different assumptions of creditors' participation;
- analysis of the fiscal capacity of the country to service the DFES scheme;
- analysis of compatibility of DFES with any other planned or envisaged debt treatment operations.

Debt profile analysis

Knowing the external public debt structure and respective repayment schedules as well as the creditors the debt is owed to is crucial for calculating the alternative scenarios of the potential DFES revenue streams. The case of the Kyrgyz Republic highlights the importance of this analysis. The Kyrgyz Ministry of Environment was particularly interested in a DFES. They launched a broad political and international process to raise support for this scheme in the country. When analysis was completed it became obvious that most of the public external debt was owed to multilateral creditors. At the time of the negotiations with the Paris Club, multilateral debt was not eligible for conversion. Multilateral creditors had a preferential status and until recently they have refused to consider any reduction in debt claims. The main argument was that multilateral creditors provide financing on concessional terms and offer new lending to debtor countries that would otherwise have no or limited access to new credit. Therefore, multilateral creditors argued that multilateral debt should be serviced first when a debtor country experiences difficulties in servicing its debts. It has also been argued that the cancellation of multilateral debt would jeopardise the multilateral institutions' ability to raise new financing for lending to low-income countries, if their credit ratings were harmed (UNDP, 1998). Most recently, this situation has changed and as of 2006, debt to IFIs' can be cancelled under the Multilateral Debt Relief Initiative.

Chart 2. Composition of public external debt of the Kyrgyz Republic by creditor type



Source: www.minfin.kg

The analysis of the Kyrgyz debt also showed that most of the bilateral obligations of the Kyrgyz Republic were accrued towards Paris Club creditors (France, Germany, Japan, Denmark and the Russian Federation) with Japan and Russia as the largest creditors to the country. Turkey was also a

significant creditor. When further analysis was conducted with regard to individual bilateral creditors and their countries' policies towards debt swaps, it became obvious that only very few countries could realistically consider such a scheme. Japan and Denmark had legal constraints to conducting debt swaps. Although Russia was the biggest creditor it was assessed that it would be the least interested in a DFES. Russia would be rather interested in debt-for-equity swaps. Turkey has had no experience with debt swaps and was very unlikely to support a swap with the Kyrgyz Republic. France which has significant experience with debt swaps and has even established debt reduction programmes is more interested in debt conversion in the African countries than in Central Asia. This realistically left Germany as the only really promising creditor.

In addition, calculations showed that the potential revenue amount would be modest and spread over time (assuming a 20% conversion rate, based on experience with similar swaps and taking into account the Paris Club conditions for the repayment of debts). The findings of this analysis were very frustrating for the Kyrgyz Ministry of Environment as they had much higher expectations given the significant indebtedness of the country. This is why in order to avoid raising unrealistic expectations, it is important that DFES should only be announced after undertaking a thorough review of the external debt structure of the country.

It is important to conduct detailed analysis of all creditors in order to obtain a realistic picture of what level of revenue may be expected. Experience shows that the most likely creditors to agree to negotiate a DFES are the Paris Club countries that are also members of the OECD. Although most of these OECD countries may have no direct transboundary environmental concerns in the debtor country, they typically have interest in protecting global environmental public goods, poverty alleviation and regional security.

In addition, experience shows that not all creditors are likely to agree on the swap at the same time and under the same conditions. Some creditors are more likely to come to the negotiation table once the debtor country has opened a "debt swap window" and once first transactions have demonstrated to be successful and not risky, as the case of Poland shows. Therefore, it is important to arrange the first swap relatively quickly and generate a critical mass of revenues so that an institutional infrastructure can be established to facilitate and accommodate further swap transactions. For bilateral negotiations, the debtor country needs to target the most willing creditors/donors first. The following factors are likely to affect creditors' willingness to engage in bilateral debt swaps:

- Exposure to direct or indirect environmental spill-over effects originating in the debtor country;
- The prior existence of an official debt swap programme or prior experience with bilateral debt swaps with other debtors;
- Commitment to the protection of global environmental common goods and to poverty alleviation worldwide;
- Expressed interest in regional security and economic development in the respective region; and
- Prior commitments to bilateral assistance for the debtor country expressed as large assistance programmes, in particular in the environment sector.

Debt sustainability analysis

In addition to debt structure, analysis of the debt sustainability of the country and its fiscal capacity to service the DFES is crucial for the success of the negotiations with creditors. There are a number of indicators used to measure and analyse debt sustainability: they are all related, but the relationship is not straightforward. The major indicators include: external debt to GDP ratio, debt service to GDP ratio, debt service to exports ratio, debt service to fiscal revenue ratio, Net Present Value (NPV) of debt. Each of these indicators captures different elements of debt sustainability. It is customary to use the ratio of external debt to GDP rather than the debt stock in nominal terms to assess the burden that external debt can impose on the economy. Broad indicators, such as the debt to GDP ratio and the debt service to GDP ratio compare the debt burden to the ability of the economy as a whole to generate income. The debt service to export ratio links the level of debt service to the availability of foreign exchange earnings in the economy as a whole. The debt service to fiscal revenue ratio links the debt service to the ability of the public sector to generate income. The net present values of debt are used to capture the concessionality of the debt stock and compare debts among creditors with different repayment schedules.

Table 1. Selected debt service indicators in EECCA countries

Country	External debt, % of exports of goods and services			External debt, % of GDP		
	2003	2004	2005	2003	2004	2005
Armenia	121.5	120.1	83.0	39.1	33.3	22.6
Azerbaijan	100.3	89.9	81.1	42.1	43.9	52.6
Georgia	151.7	111.4	110.7	49.0	39.3	33.4
Kyrgyz Republic	265.5	223.3	228.6	103.0	95.1	88.2
Moldova	181.7	146.1	129.7	97.2	74.2	68.2
Tajikistan	105.6	70.9	73.5	66.3	39.7	37.7
Uzbekistan	117.2	93.0	85.9	44.8	36.7	32.5

Source: EBRD Transition Report, 2006.

As Table 1 shows, the debt service indicators have been improving in the EECCA countries but in some they still remain high (particularly the Kyrgyz Republic and Moldova) indicating an unsustainable level of debt. Debt is sustainable when the government is likely to have sufficient revenue and foreign currency to pay back its loans and obligations. Thus, a debt sustainability analysis is needed to check the capacity of the debtor country to find resources to service obligations under a potential DFES. Financing of such obligations from the budget will compete with a number of other investments already underway which will incur operating and maintenance costs further in the future, or with social expenditure and other debt servicing responsibilities related to any planned or envisaged debt treatment operations. These and other constraints need to be clearly considered in the analysis of the debt servicing related to a potential DFES.

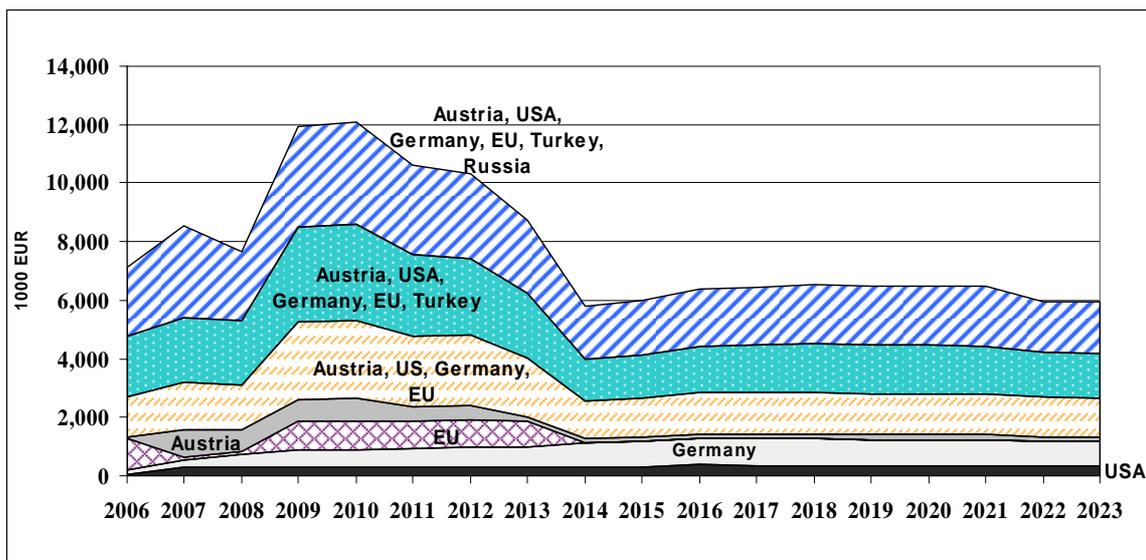
In any case, the debtor country should be able to demonstrate that after the swap is agreed there will be no risk of default of the country and that it will have the fiscal capacity to finance the domestic expenditure from the swap. This commitment of the government should be included in the Law on the Budget for each year over the period of the DFES implementation.

Forecasting revenue streams from potential DFES

Experience with bilateral DFES between the Paris Club and debtor countries shows that in preparing a revenue forecast probably not more than 15-25% of the debt can realistically be expected to be reduced through the swap mechanism⁸. As noted earlier, creditors will most likely agree to join the DFES scheme at different times and under different conditions. Hence, the need for different scenarios based on various alternatives for creditors' participation in the swap.

Chart 3 below shows an example of a revenue forecast prepared for Georgia with different scenarios for creditors' participation. This forecast however assumes that creditors in each scenario join the swap at the same time and does not account for start-up and administrative costs needed to run an institution established to manage DFES resources. Therefore, these are indicative calculations and they should be adjusted once actual negotiations take place and progress. Most importantly however, whatever the level of resources, the debtor country will need to convince creditors that the government will have the capacity to transfer these funds in full amount, on time and for agreed purposes.

Chart 3. Estimated revenue flows from a DFES in Georgia under alternative scenarios of creditors' participation (Thousand Euro)



Note: Assuming a 15% swap rate on all repayments of official development assistance (ODA) loans until the year 2023. For non-ODA loans, a ceiling of 5 million special drawing rights for the total of each country has been assumed.

One other issue that needs to be considered when making revenue forecasts is the schedule for transferring revenues from the DFES to the financial institution. There are two major options for timing the transfers used world-wide:

- A one-time swap of an agreed amount of the present value of the debt; and
- Swap as you repay annually over an agreed period of time.

⁸

The US, Swiss and Norwegian governments agreed to convert 10% of the debt Poland owed them, and Sweden converted 4%, Italy 2% and France 1%. Bulgaria made a swap with Switzerland, reducing its debt by 23% (Swiss Francs 20 million).

Through a **one-time swap transaction**, a creditor agrees to write off a portion of an outstanding debt owed by the debtor. The present value of all future repayments of this cancelled debt would be converted into local currency. This sum would be the basis for negotiations of the amount of money that the debtor government would need to transfer up-front to the financial facility managing the DFES or to pay the recurrent or capital costs of specific projects. Such a transaction has often been used in developing countries to swap debt for nature protection purposes. The assets in local currency are then transferred to a trust fund and used to finance projects either from the net income or from the entire principal.

However, the amount of debt to be swapped through a one-time transaction may be constrained by the liquidity limits of the debtor country, which may find it difficult to set aside a large amount of money in one instalment. In a richer country, the government would issue a bond to by-pass this problem. The debtor government would need to evaluate how realistic this option could be in a DFES.

Through a **swap-as-you-repay transaction**, a creditor agrees on the percentage of the future debt service that would be diverted each year to domestic expenditures over an agreed period of time. These expenditures could be transferred either to the financial facility managing the debt-for-environment swap, or used to pay for specific projects.

Experience shows that the swap-as-you-repay scheme is the first best choice, as it allows for the development of a more long-term project pipeline. It could also generate a critical mass of resources to finance the rehabilitation of some fixed assets without distorting the fiscal and monetary policy of the country.

Defining the expenditure programme

Establishing a credible expenditure programme that responds to priority concerns of both creditors and the debtor government will be essential to gain support for a debt-for-environment swap. To be successful, the proposed programme needs to be narrowly focused on a few priorities and demonstrate how a solid pipeline of projects could be prepared and supported to meet its objectives.

As experience shows the analysis of the specific pipelines in each priority area can go as a minimum through the following major steps:

1. **Familiarisation with the current and expected work of other partners in the debtor country** - this first step involves the identification of current and expected projects of international agencies, government and NGOs in the priority thematic areas.
2. **Identification of assistance gaps in view of national strategy documents** - this step consists of the analysis of existing portfolios and pipelines against priorities set by strategy documents in the priority areas identified. The gap analysis results in the identification of “entry points”, which are defined as national priorities that receive no or insufficient funding.
3. **First identification of the most promising pipeline opportunities** - within the strategic entry points, various types of projects are screened against general eligibility requirements agreed up-front within the government. This work forms the basis for the identification of at least 1 or 2 potential pipelines in each priority area. Suggested pipelines are analysed in terms of **(i)** geographical location of eligible projects; **(ii)** main types of projects, including the financial size of projects; **(iii)** typical project owners (e.g., municipalities; municipal enterprises); **(iv)** justification of DFES financing of the pipeline, including the expected outcomes at a local, regional and/or national level.

4. Selection of the most promising pipelines - the government identifies several most promising pipelines which are then subjected to further economic and financial analysis.

Throughout this process, the debtor government can also informally consult potential creditors/donors and check their interest in specific environmental issues that they may be willing to support in anticipation of future negotiations.

Box 11. Kyrgyz experience with developing potential project pipelines

The Kyrgyz case study sheds some light on how to proceed with identifying potential project pipelines. In the beginning, various types of projects were screened against general eligibility criteria which were agreed upon with the Kyrgyz government. The starting point was that successful project pipelines should achieve environmental benefits jointly with poverty reduction, and should facilitate local sustainable growth and job creation. In particular, the projects within each priority area should:

- facilitate the achievement of water and environment-related Millennium Development Goals, the 2003 Johannesburg WSSD (World Summit for Sustainable Development) targets and the objectives of the WEHAB (Water Supply and Sanitation, Energy, Health and Environment, Agriculture and Biodiversity) agenda;
- facilitate alleviation of poverty, and generate sustainable local incomes;
- provide regional or global environmental benefits, and facilitate the fulfilment of international environmental agreements signed by the Kyrgyz Republic;
- contribute to peace and security in Central Asia by alleviating regional and cross-border conflicts related to the management of shared and transboundary natural resources; and,
- be consistent and complementary to other foreign aid programmes and contribute to the implementation of international commitments made by the Kyrgyz Government.

Based on the above criteria, three priority areas and five specific project pipelines were identified. The pipelines were analysed in terms of geographic location, main project types, typical project owners as well as project (financial) sizes. In addition, all current and expected project portfolios/pipelines financed by different sources were reviewed and funding gaps analysed with the aim of identifying a niche where DFES resources could be most useful. The final choice of the project pipelines took into account the forecast of likely revenues of the DFES scheme. Special attention was given to projects that can attract co-financing from other sources, including the private financial sector, IFIs and foreign grants.

Given the low level of revenue that can be realistically expected from potential DFES, it was only reasonable for the Kyrgyz Government to focus their attention on developing the first two most promising pipelines identified through this analysis (namely, the biogas production from animal waste and prevention of irreversible loss of biodiversity). However, if the more optimistic scenario for the participation of more creditors materialises, other more investment-intensive project pipelines can be considered. In any case, co-financing will be needed for the implementation of any of these project pipelines.

In addition, it is important to prepare justification of each proposed pipeline and clearly state potential difficulties and challenges. Also, involving the NGO community and other relevant government agencies in the discussion on the potential expenditure programme early in the process can only raise broad support for the scheme.

Experience shows that to be successful this first assessment should be further supplemented by a full economic and financial evaluation of (at least) the two-three most promising pipelines identified. This full evaluation should include, among other things, analysis of the legal and regulatory framework of the sector, economic analysis and financial viability of the proposed project pipelines (including potential technologies, investment and operating and maintenance costs), potential role of markets and institutional constraints/opportunities, risks and assumptions, stakeholders' analysis, including private and public cost-benefits generated by the project, expected global benefits, public

participation options, sustainability and replicability of the proposed project pipeline. Implementation modalities and budget requirements, including financial options, should also be analysed in detail. Additional aspects of the analysis can be considered depending on the type of the specific project pipeline.

In addition, it is worth noting that even if the DFES does not materialise, the analysis of the project pipelines remains valid and could be used by the debtor government in discussions with donors on developing donor support programmes in the country.

The Polish experience shows that even if the revenue made available through DFES is significant it is never sufficient to solve all problems. This is why it is important to identify few priority areas and support the most cost-effective projects. Currently, the Polish EcoFund supports investments within 5 narrowly-focused priority sectors. These include:

- reduction of transboundary air pollution of sulphur dioxide and nitrogen oxides and elimination of the low sources of such emissions;
- reduction of pollution and eutrophying flows into the Baltic Sea and protection of drinking water sources;
- reduction of emissions of gases causing global climate change (global warming and stratospheric ozone);
- protection of biological diversity; and,
- promotion of waste management and contaminated soil reclamation.

Major lessons learnt

Preparing a good debt analysis and developing a good understanding of the realistic potential of expected DFES revenue are key for starting the process on solid grounds. An important lesson from experience is that a DFES is much more than a financial operation. It is a strategic process which includes the use of the product of the swap. Using the funds so generated and preparing a credible expenditure programme is often more complicated than the financial operation itself. A well-designed and a credible expenditure programme can help to gain the interest and trust of creditors.

Government officials need to devote significant efforts to preparing the DFES transaction. In some cases governments need to commission foreign advisors to help them in implementing debt swap transactions. Advisors cost money and these costs should be taken into account when analysing the potential benefits from DFES.

Some of the major lessons learnt from this stage of the preparation for negotiations include:

Intragovernmental approach

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

Before launching a DFES there should be strong consensus among and support by all relevant ministries within the debtor government, especially the ministry of finance. The ministry of environment should not announce plans for DFES without prior consultations and agreement with the ministry of finance.

Concluding a DFES takes time, perhaps as much as 2 to 4 years. It follows that:

- the ministry of finance needs to be convinced that entering into negotiations for a DFES is worth the effort;
- the policy and institutional framework should be stable, with a strong commitment that lasts over time. Changes in the government should not affect agreements on rules and conditions agreed with creditors.

Analysing the debt structure and expected revenue flows

A thorough and rigorous analysis of the debt portfolio is key to secure the support of the ministry of finance and of potential creditors. This analysis should be prepared jointly with the ministry of finance. Such an analysis should include the following:

- analysis of the debt profile, debt sustainability and repayment schedule;
- careful identification of priority creditors for bilateral DFES negotiations;
- analysis of alternative scenarios for potential DFES revenue under different assumptions of creditors' participation;
- analysis of the fiscal capacity of the country to service the DFES scheme;
- analysis of compatibility of DFES with any planned or envisaged debt treatment operations.

As not all debt is eligible for conversion, the revenue from potential DFES might be lower than the overall debt burden of the country. This might frustrate major stakeholders who might have had higher expectations. To avoid raising unrealistic expectations, DFES should only be announced after a review of the external debt structure has been undertaken. In addition:

- The debtor country should be able to demonstrate that after the swap is agreed there will be no risk of default of the country and that it will have the fiscal capacity to finance the domestic expenditure from the swap. This commitment of the government should be included in the Law on the Budget for each year over the period of the DFES implementation. Alternatively, the budgetary commitments can be included into the debt-conversion treaty with the creditor.

- It is important to try to arrange the first swap relatively quickly after the agreement with the Paris Club has been signed and generate a critical mass of resources so that an institutional infrastructure can be created to facilitate further swap transactions.
- A swap-as-you-pay scheme should be preferred to a one-time swap transaction as it allows for the development of longer term project pipelines and can be paid in instalments over the years, thus easing the pressure on the public budget.

Defining the expenditure programme

- A credible expenditure programme that responds to both the debtor and creditor countries' priority concerns is key in attracting creditors' attention.
- An expenditure programme should be realistic (the size of the DFES envelope should be carefully calculated), narrowly-focused on a few priorities, and demonstrate a solid pipeline of attractive projects.
- Most attractive project pipelines focus on issues that generate transboundary and global environmental benefits. Equally attractive project pipelines address other internationally-agreed objectives, such as the Millennium Development Goals (for example, the debtor country could develop a project pipeline that contributes to poverty reduction through the creation of additional jobs or by promoting peace and security in the region). This is a way to demonstrate the benefits for creditor countries to enter a DFES.
- Even if the DFES does not materialise, the analysis of the project pipelines remains valid and could be used by the debtor government in discussions with donors on developing donor support programmes in the country.

Harnessing additional sources of finance

- The proposed expenditure programme should be designed so as to leverage finance from other sources. This is crucial, particularly for larger investment pipelines where potential DFES resources alone would not be sufficient.

CHAPTER 4. INSTITUTIONAL OPTIONS FOR THE MANAGEMENT OF THE DFES EXPENDITURE PROGRAMME

Creating the necessary institutional infrastructure to manage swapped resources is a key aspect of the successful design of a debt-for-environment swap. There are a number of institutional issues that a debtor government will need to consider in choosing the institutional arrangement that will best fit international and national environmental and financial interests. Some of the major issues include:

- Choosing the swap model – including parties and time frame;
- Deciding on the use of an existing or establishing a new institution for expenditure management;
- Defining the rules of implementation of environmental projects.

Obviously, institutional solutions have to account for the specific characteristics of the potential DFES. Whatever the final choice, experience shows that it is best when the institution is managed by domestic professionals thus also contributing to local capacity building which is a prerequisite for carrying out environmental protection on a sustainable basis.

Swap implementation models

The first institutional issue of swap implementation relates to participating parties. Different models and different institutional arrangements have been used worldwide to manage resources made available through DFES.

Bilateral / multilateral swaps

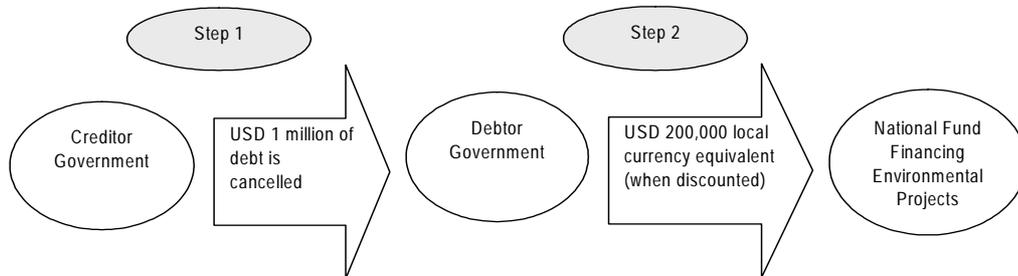
Two main models of debt swaps have been in use so far. These depend on the number of negotiating parties in a transaction. These two models are:

- Bilateral (direct) swaps; and,
- Trilateral or multilateral swaps (through an intermediary).

Bilateral (direct) swaps: When the swap is bilateral, the creditor government cancels debt owed by the debtor government in exchange for the debtor setting aside an agreed amount of counterpart funds in local currency for an agreed purpose. This model is used mostly in official (government to government) debt swaps. The bilateral model has been used to convert Official Development Assistance (ODA) debt and publicly guaranteed export credits. The best known and advanced case of bilateral debt-for-environment swap is the swap that Poland made with Paris Club creditors in 1991-2009. In addition, bilateral swaps can also be made through a swap facility, which gives the debtor a standardised framework for swapping several bilateral debts for one expenditure programme. It should be emphasised that bilateralism does not necessarily imply the lack of coordination. For instance, the Polish swaps are bilateral, but they are coordinated and administered by a single entity.

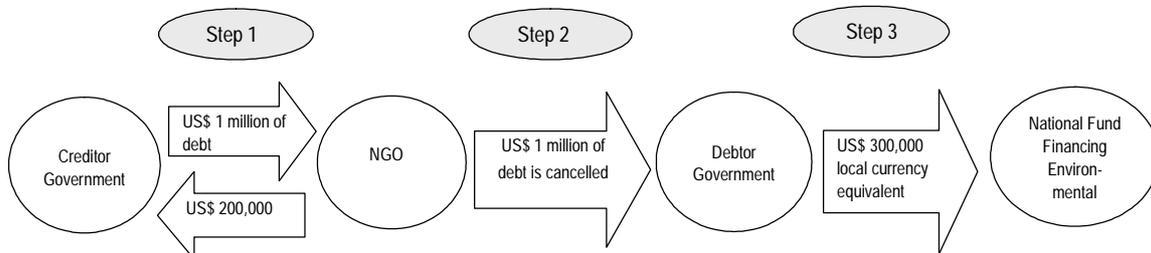
Figure 1 below presents the schematic model of a standard bilateral swap transaction.

Figure 1. Model of bilateral swap



Third-party (trilateral/multilateral) swaps: A transaction can also be concluded with the participation of a third-party. The difference between the purchase price of debt and its redemption price in local currency is the gain from debt conversion, which can be invested in environmental projects. An organisation (e.g. an NGO) solicits debt donations or purchases debt at a secondary market at a discount from face value from a creditor and negotiates separately with the debtor government the cancellation of the debt in exchange for project funding. Debt-for-nature swaps that have been negotiated by conservation NGOs such as *Conservation International (CI)*, the *Nature Conservancy* and the *World Wildlife Fund (WWF)*, have mostly been three-party swaps. Figure 2 below presents the schematic model of a standard trilateral swap transaction.

Figure 2. Model of trilateral swap



Note: Assumptions: 20% debt purchase price, 30% payment in local currency.

The converted debt is usually deposited in the form of local currency denominated government bonds in a conservation trust fund that disburses the funds (derived from interest and amortisation of the bonds) for conservation purposes agreed upon in advance with the creditor.

It is worth noting that Paris Club rules envisage the possibility of selling debt by the creditor government to an investor who in turn sells the debt to the debtor government in return for shares in a local company or for local currency to be used in projects in the country (www.clubdeparis.org – debt swap provision). Thus, the third-party swap may be also applied under Paris Club arrangements.

Examples of trilateral swaps have been more common in Latin America, Asia and Africa since the 1980s. Through trilateral swaps, both official and non-official debt can be converted.

Box 12. Example of a trilateral swap

The first debt-for-environment swap was implemented in Bolivia in 1987, where USD 650 000 of Bolivia's debt (a fraction of a percent of the country's substantial indebtedness) was bought by Conservation International for USD 100 000 (roughly 15 cents in the dollar) in the secondary financial market and retired. In exchange, the Bolivian government agreed to expand protected areas around the Beni Biosphere Reserve by 1.5 million hectares. The Bolivian government contributed USD 100 000 to the protection programme and also received a USD 150 000 grant from the United States Agency for International Development.

Trilateral swaps usually involve relatively small amounts and one-off financial transfers to create an endowment of a trust fund. Trilateral swaps are used to finance a portion of the running costs of nature protection areas or small NGO non-investment projects. Trilateral swaps rarely have the potential to generate a critical mass of resources to support investment projects (e.g. the rehabilitation of deteriorated environmental infrastructure). They also introduce an additional constraint into expenditure planning – the interests of the NGO intermediary must be taken into consideration. This may or may not be compatible with the preferences of creditors and/or the debtor government.

Trilateral swaps have been the remedy in countries with corrupt, dictatorial governments, which could not be trusted. Therefore, the role of NGOs as intermediaries. Where a country is making progress in building democracy, civil society and improving governance, it may not be necessary to take expenditure management out of the hands of the institutions controlled by the government and put it into the hands of an international NGO. Domestic NGOs can and should play the role of watchdogs, but not necessarily as intermediaries. International environmental NGOs have so far shown little interest in low-income countries of the former Soviet Union in this respect. It is less likely that, in the foreseeable future, they will be willing and able to raise funds to buy the official debt of, for example, the Kyrgyz Republic, Moldova or Georgia, from their creditors.

Usually, trilateral swaps are used when: (i) the creditor is a private company; (ii) transfers of money are not systematic and are organised on a case-by-case basis; (iii) environmental projects are not associated with investments. Under trilateral schemes, the debtor country government assumes a somewhat reduced role and less domestic capacity for expenditure management is needed.

As experience shows, the most sizeable swaps have been bilateral swaps of government debt without intermediaries. A single bilateral swap of Polish debt diverted more debt money for environmental purposes than all trilateral swaps world-wide taken together. Bilateral swaps can generate a critical mass of predictable environmental financing over a longer period of time.

The important progress, which has been achieved already in opening the window for bilateral swaps with Paris Club creditors, makes such transactions feasible in the near future. It should be noted, however, that bilateral transactions can be designed in a way that could accommodate any number of one-time transfers from single swaps of public or private debt facilitated by potential intermediaries. They can also encourage other (non-swap) donations if the facility established for DFES purposes proves to be efficient and reliable. Because of its good performance, the Polish EcoFund was rewarded with several grants from donors to manage.

Institutional forms to manage DEFS resources

Both bilateral and trilateral swaps can be disbursed locally, either directly to specific projects agreed with a creditor, or transferred to an established financial institution, which selects projects under the supervision of relevant stakeholders, including creditors. Thus, there are two major institutional forms to manage swap resources. These include:

- **Swaps on a project-by-project basis** are transactions that tie individual swaps to specific projects selected and controlled by the creditor country and implemented by the debtor country.
- **Swaps through a domestic financial institution** are transactions that transfer money to a domestic financial institution, which manages the expenditure programme and project pipelines (including project appraisal and selection) according to procedures and criteria agreed jointly between the creditor and debtor countries.

The choice between the two options is not straightforward. It depends on the expected preferences of creditor countries, as well as on the size of the overall envelope of the swap transaction. Any successful transaction must be win-win for both parties.

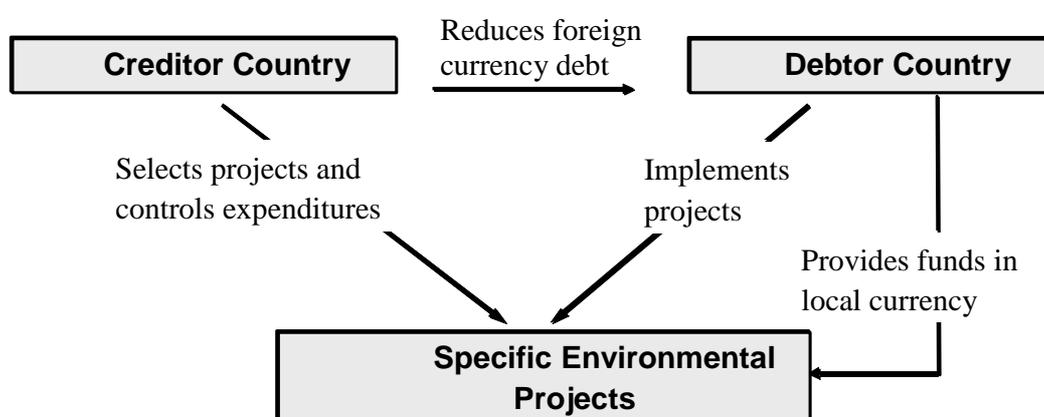
Creditors' preferences will be fully revealed only when negotiations actually begin. On the basis of international experience it can be expected, however, that a project-specific swap may be attractive to some creditors for a number of reasons. For example:

- It gives creditors stronger assurance regarding how exactly their money will be spent;
- It makes it easier for creditors to enforce tied procurement, hence to recuperate partly their financial losses by purchasing goods and services from creditors' suppliers. It should be emphasised however that tied procurement compromises economic efficiency, since the cost of projects can be much higher than under international competitive tenders. The first DFES signed by Poland with Finland provides such an example. Tied procurement made this scheme economically inefficient. The prices asked by Finnish contractors were so excessive that even after the 20% budgetary subsidy they were higher than those offered in the market. In its first year of operations (1991) the Finnish fund was unable to finance any project despite an active promotion among (poorly) informed village and small town mayors;
- As an *ad hoc* arrangement, it usually requires lower transaction and administrative costs. It does not involve a specialised institution to manage the project cycle. The function of overseeing the implementation of *a priori* agreed projects can be incorporated into the existing operations of government and/or non-government institutions at a low incremental cost. It can also be contracted out to short-term consultants.

Swapping debt for specific projects can be considered, if the value of the transaction is small, and tied procurement cannot be avoided. But in the latter case, the debtor government may want to decide, if the swap pays off at all.

The operational model of a bilateral swap on a project-by-project basis is presented in Figure 3.

Figure 3. Bilateral swaps on a project-by-project basis

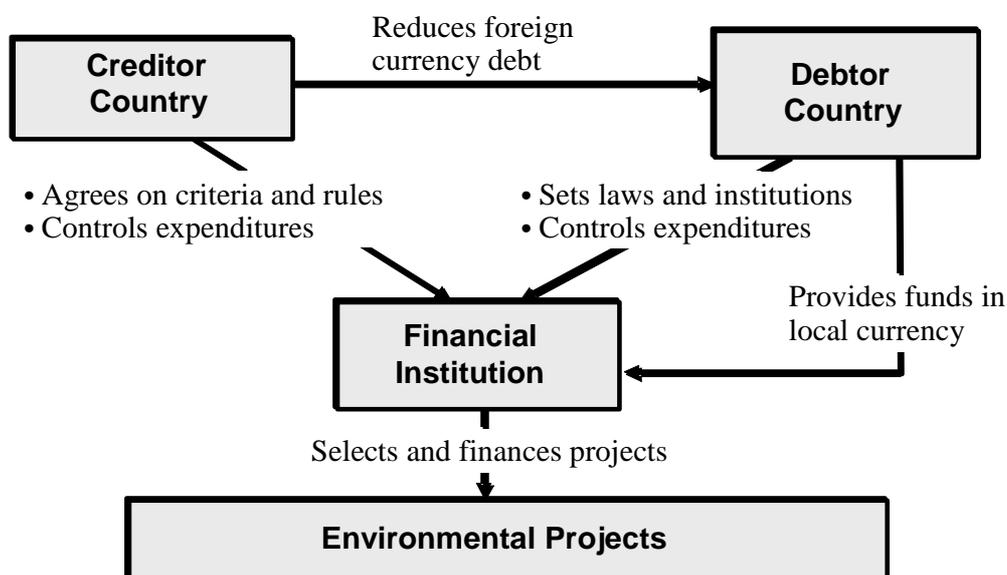


The alternative option is to swap the debt through a specially established, local financial institution that would manage the whole project cycle (project identification, appraisal, financing and monitoring) under the rules agreed between and control of the parties to the transaction. Project selection and procurement tend to be much more competitive in this arrangement. As experience shows, the option of establishing the financial institution to select projects on a competitive basis has several advantages:

- The selection of projects on a competitive basis facilitates the more efficient use of resources and increases the environmental benefits of the swap. In the absence of competition under the project-specific swap, suppliers from the creditor country tend to increase their prices, which may render many projects financially non-viable even with a significant subsidy.
- The establishment of a locally managed institution to administer swapped funds also increases the development benefits of the swap. When properly designed, it might contribute to the better management of local and global common goods not only by channelling resources to the right projects, but also by creating the necessary institutional infrastructure in the country.
- Having in place a transparent and credible institution, which effectively and efficiently selects and finances environmental projects, can attract additional financing from donor countries, international institutions, NGOs or other financing sources (grants, trilateral debt swaps, loans, etc.). There are many examples world-wide that good governance and effective expenditure management attract public and private finance.

The operational model of bilateral swaps through a local financial institution is presented in Figure 4.

Figure 4. Bilateral swaps through a local financial institution



However, the value added of transferring swapped funds through a financial institution must be weighted against the incremental transaction and administrative costs of setting up and operating this institution. Experience shows that the transaction costs of establishing and the annual costs of running a debt-for-environment swap institution with regard to a threshold swap amount that would justify this option should represent a reasonably small portion (below 5%, where the Polish EcoFund experience is taken as a benchmark) of average annual expenditures, excluding start-up costs. For example, the pre-feasibility study for the Kyrgyz Republic concluded that swapping the debt of only two of the potential creditors (France and Germany) would not justify the establishment of a new permanent institution with a relatively sophisticated project cycle. In such a case, it is recommended to identify an existing institution whose management structure is appropriate, meets creditors' requirements and can (legally) accommodate the DFES. Alternatively, if the revenues from the swap are very small, the debtor country can consider implementing individual projects rather than creating an institution. In the Kyrgyz case, if two other creditors (Russia and Turkey) join, a local financial institution could become a viable option. Hence, different institutional options need to be considered.

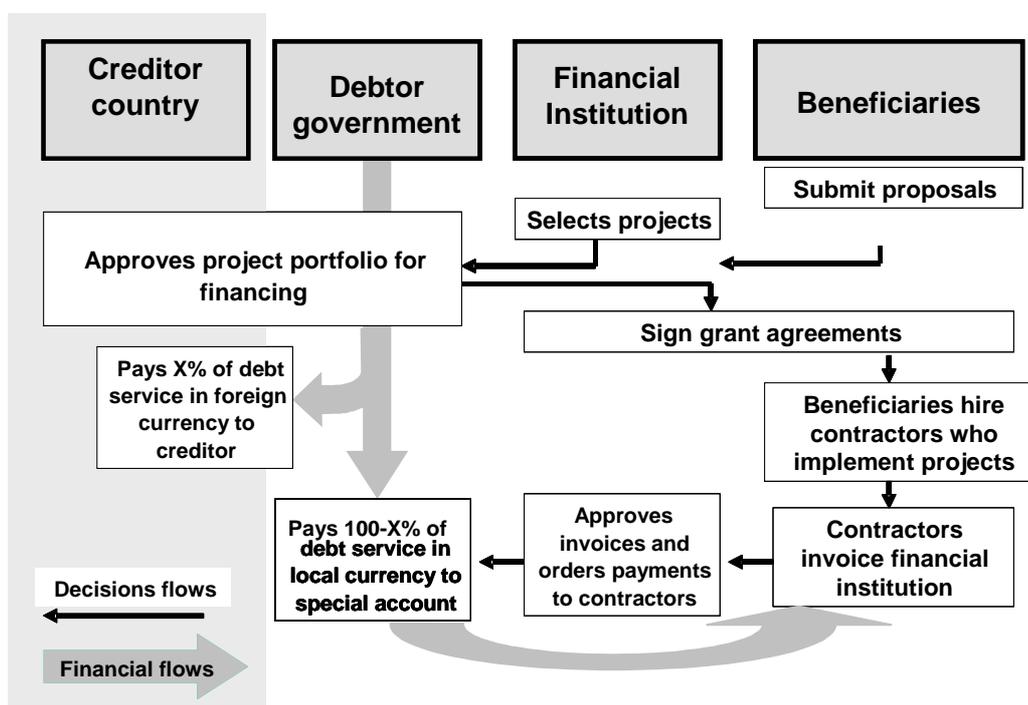
If administrative costs of setting up a local institution, with regard to the expected DFES revenue flows are too high, the debtor government may seek support from the international community (World Bank, UNDP) or seek other possible ways of integrating the management of the project cycle into other domestic (preferably, internationally-supported) institutions in the country. In the case of the Bulgarian Trust Ecofund, the World Bank provided a grant to cover the initial start-up costs of the Fund before actual disbursements to projects were made. This was crucial in starting the operations of the Fund in a smooth and efficient manner.

Institution for expenditure management

If expected revenue justifies a decision to set up an institution to manage DFES resources, there are a number of issues that need to be considered in order to substantiate this choice. These include, among others, the choice of a suitable legal, cost-effective form and an appropriate life cycle of the institution.

In case of implementation of the DFES through a local institution, the swap operation scheme could be presented as in Figure 5 below.

Figure 5. Annual decisions and financial flows in debt-for-environment swap in a local financial institution



In the case of transferring swap resources to a special financial institution, the domestic expenditure, eligible for reimbursement from the debt swap scheme, would be subtracted once or twice a year from a special escrow account with the bank where the debtor government services its external debt, or with a selected commercial bank. The exact cycle of transfers would need to be adjusted to the project cycle of the financial facility. Once or twice a year, financing contracts would be signed between a group of beneficiaries and the financial facility that manages the DFES scheme and that represents the government. The facility invoices the ministry of finance for the amount on accounts payable. The amount invoiced – instead of being transferred to creditors' accounts – flows back to the debtor country to credit the account of the DFES financial facility, which then is able to reimburse successful project applicants (or directly their suppliers and contractors who implement the projects). This scheme is used in both the Bulgarian and Polish Ecofunds.

Some stakeholders may be concerned that channelling money through a financial facility is too risky because of corruption and perceived potential for the misuse of the money. If these concerns are constraints for the debt-for-environment swap, then the transaction can be designed so that the local financial facility does not physically transfer money. Its role could be reduced to managing the full

project cycle, except for the financing. Having appraised and selected the portfolio of projects for financing in a given year, the facility could forward the ranked list of projects and documentation to the ministry of finance. After checking eligibility and making a final decision, the grant agreement could then be signed between beneficiaries and the ministry of finance or a designated bank. Invoices could be transferred through the DFES facility, but actual payments could be made by direct transfers from the Bank for International Settlements⁹ to beneficiaries or their contractors. Follow-up project monitoring could be done by the DFES facility. Such an arrangement solves one problem but creates other difficulties. It increases the transaction costs for both the debtor government and beneficiaries. It also dissipates responsibilities for project selection.

Legal status

Four main legal forms of locally established institutions have been used so far in various countries to manage debt-for-environment swaps. These are: government agency, trust fund, public foundation, and association. A short description of these forms is provided below.

The government-owned agency (legal person in public law) would require a government (or presidential) Decree or a Parliamentary Act to be established. Many comprehensive environmental funds capitalised by earmarked environmental fees and fines in CEE and EECCA are (or have been) established in this way. Such an agency is usually set up jointly by the ministry of finance and the ministry of environment. The ministry of environment manages the project cycle while the ministry of finance executes the financing transactions through an escrow account in the Central Bank of the country or in the Bank for International Settlements.

The trust fund. Trust funds are instruments that are developed and used in the countries usually referred to as “common law” countries, *i.e.* essentially the current or former member countries of the Commonwealth and the United States, and are not usually applicable in “civil law” countries.

The public foundation. The functional substitute for charitable trusts in the countries, whose legal system is based on “civil law”, is the “foundation”. Foundations exist in most continental European countries and are widely used by major environmental institutions there. For example, the Polish EcoFund has the status of a public foundation defined in the Civil Code and in the special Law on Foundations.

The association under civil law can be established by private individuals and institutions to serve specified public interest or the common interest of the concerned parties. In contrast to the foundation, the association usually requires a collective effort of a larger number of parties. Sometimes, there is a required minimum number of people before a group can be considered an association. This can be a limiting factor for the institution managing debt-for-environment swaps. Too many decision-makers may dissipate responsibilities for decisions, compromise operational efficiency and increase transaction costs.

As experience shows, the effective management of the institution can be ensured through the formation of a governing board comprised of the representatives of state agencies, creditor countries, international organisations and NGOs. The competence of the governing board, number of its members, voting procedure and other relevant issues will be determined in accordance with a Charter that needs to be developed. The members of the governing board will be elected by the founders. To

⁹ The Bank for International Settlements is an international organisation which fosters cooperation between central banks and other agencies in pursuit of monetary and financial stability. Its banking services are provided exclusively to central banks and international organisations.

prevent any discretionary decisions of the state in respect to the election of the members of the governing board, it is preferable that the issues of the formation, election, representation in the governing board as well as its competences be settled in the international agreement.

Box 13. Polish EcoFund governance structure

The *Supervisory Council of the Polish EcoFund* consists of representatives of the Polish state administration and the Parliament, as well as representatives of the governments from the countries which have agreed to contribute to the EcoFund. The members of the Supervisory Council are appointed by the Founder (Minister of Treasury), except for the EcoFund Chairman, who is nominated by the Minister of Environment. The Management Board members are appointed by the Supervisory Council. All members of the Council and the Board are appointed individually for a term of 3 years.

Life cycle of the institution

Another issue to consider in choosing the institutional arrangement for managing potential DFES resources is the life cycle of the institution. The following four main forms are used in international practice:

- The endowment fund, is created by single discrete transfers of financial assets. These assets sit in a bank account as an endowment or are invested in other revenue generating assets (e.g., government bonds, stocks), and the institution can disburse only the net income earned on these assets. To make these investments possible, mature financial markets are needed. Fund management requires a sufficient degree of sophistication in management and, therefore, is costly. The debtor usually has no control over the endowment, so political risks of debtor liabilities are low; hence, this is a convenient feature for trilateral swaps. However, such a form of fund usually provides relatively small amounts of money for environmental projects in comparison to the endowment.
- The sinking fund, which is created by single small transfers of assets, disburses both net income and principal. Management of this type of fund is simpler. It is also used mainly in trilateral swaps. Once initial capital is provided, this fund is not further replenished.
- The revolving fund, is replenished by its own operations (loans to clients) or by new injections of funds. Thus, there are two types of revolving funds: "externally-revolving", and "internally revolving". The former— of which the Polish EcoFund is an example – have long-term sources of external revenues (e.g. converted debt-service payments). The latter – such as the Polish National Fund for Environmental Protection and Water Management – provide loans and therefore can recuperate some of their expenditures. The two types of operations are very different and require different skills. With regard to DFES, this form is suitable for larger swaps implemented over the debt service period, so that the inflow of money is relatively smooth. The fund receives a new portion of resources each year. The Polish EcoFund receives bi-annual transfers from the Ministry of Finance and knows the schedule of its core revenue several years in advance. This form allows for a stable and predictable revenue flow which is crucial for the smooth implementation of the expenditure programme managed by the institution. It is also simpler in management in comparison to an endowment fund. Obviously, when new and additional funds are no longer added, the fund has a choice either to sink or to establish an endowment and live on the net income for perpetuity.

- The modular fund, is a mix of all others. It allows for the existence of multiple accounts and different financing modes and “windows” in one institution. It has some endowment, some sinking, some revolving components depending on the creditor/investor/donor preferences. Obviously, this form is rather complicated in management.

Which of the above options will be most suitable will depend on the specific characteristics of the envisaged DFES. The pre-feasibility study for Georgia, for example, concluded that in the Georgian circumstances of bilateral swaps and a desired simplicity of management, a revolving fund solution is the most suitable institutional arrangement.

Governance and management

Accountability to all stakeholders, and shielding from *ad hoc* political interference, will be crucial for the financial institution to gain credibility domestically and internationally. This can be achieved, among others, through objective, accountable, transparent and highly professional operations. Credibility to stakeholders and demonstrated ability to achieve stated objectives efficiently will also be decisive factors for its ability to leverage additional local and foreign financial resources.

An essential factor for ensuring the accountability of the domestic financial institution will be the proper design of its governance structure and management system. Experience shows that best results are achieved when the structure is set up in such a way as to enable all main parties to be involved in the key decision making processes, with balanced representation and voting rights and with effective powers to oversee implementation of decisions. The most successful institutions managing DFES resources usually allow creditor countries, the debtor government and other internal and external stakeholders, such as NGOs, academic institutions, contributing donors, etc., to effectively incorporate their interests into the expenditure programme while having all appropriate checks and balances in place.

Box 14. Minimum criteria for good governance of the financial institution

Experience suggests that the following requirements of the governance structure should be mandatory, if the institution is to become a credible partner both domestically and internationally:

- Clearly defined, stable and internationally understood legal status;
- Written transparent procedures of decision-making;
- Well-defined narrowly-targeted priorities and expenditure programmes agreed with all stakeholders;
- Accountability, transparency, anti-corruption measures;
- Creditors' supervision and control embedded into the procedures and decision-making;
- Operational autonomy of the executive management;
- Objective, unambiguous and meaningful selection criteria (cost-effectiveness should be key);
- Capacity and incentives to leverage funding from other sources (with co-financing requirements clearly specified);
- Discretion subject to procedures;
- High qualifications and integrity of staff.

This is the case of both the Polish and Bulgarian Ecofunds whose governing bodies are a platform where the vested interests of all relevant stakeholders are represented. Such an arrangement leads to an efficient and credible decision-making. Internationally-recognised good practices of public expenditure management show that for all governing bodies to be accountable there must be a clear division of responsibilities between the governing body and the executive body. In particular, it is best

when responsibility for programming is separated from the responsibility for the selection of individual projects.

The governing body need to be held accountable for establishing strategic objectives, eligibility and appraisal criteria, “rules of the game” and for supervision. An executive body would be responsible for the implementation of these established rules in the day-to-day operations. There is always a strong temptation for different political stakeholders represented in the governing body to cross the line between governing and managing daily operations, and in particular to influence decisions about selecting individual projects. International experience shows clearly that if this happens, the public institution becomes a battlefield of vested interest groups, losing transparency, credibility, efficiency and effectiveness.

As experience shows, the best results are achieved when the day-to-day management of the project cycle, in particular appraisal and selection of projects, is vested with an operationally independent executive management unit, staffed with non-political professionals and held strongly accountable for their performance according to the rules established by the charter and by the governing body.

As the Bulgarian case shows (see Box 15), local politicians sometimes try to capture public financing opportunities for their narrow political interests in disregard of agreed rules and procedures. The presence of representatives of the international community who usually sit on the governing/supervisory boards of the Funds is crucial as it provides a significant counter-balance to local interests and ensures, to the extent possible, that mismanagement of resources is prevented.

Box 15. Governance issues in the Bulgarian National Trust Ecofund

The performance of the Bulgarian National Trust Ecofund (NTEF), managing resources generated from a DFES with Switzerland, is universally praised by beneficiaries, including representatives of municipalities, NGOs and public institutions, government officials, representatives of key foreign and international partners, such as the World Bank, the Danish Environmental Protection Agency, the USAID, the Swiss Government. These institutions frequently cite the expertise, professionalism and commitment of the Fund’s leadership and staff as key to its provision of effective and efficient services.

The Fund is known for its rigorous project selection procedures and transparent decision-making. The Fund has developed clear rules and criteria and the Fund’s staff apply these criteria without discretion. Over the years, the Fund has worked in a difficult and challenging environment at the crossroads of different political interests. The Fund staff, however, have not bent to external pressures to finance projects which do not meet the agreed criteria. This may well have been one of the reasons why politically, the Fund was largely disregarded and marginalised for some time by previous governments. The most unfortunate result of this atmosphere and the failure of the Bulgarian government to fully appreciate and take advantage of the potential offered by the Fund was the lost opportunity to implement additional debt swaps and raise more money for environmental investments in the country.

Most recently, however, given that the revenue from the swap were exhausted and in recognition of the achievements of the Fund and the important expertise that its staff have accumulated over the years, the Bulgarian government has opened a new financial window in the NTEF, the Protected Areas Fund. The Ecofund has been given the task to manage resources dedicated to projects in the area of landscape, natural habitats and biodiversity preservation. The future of the NTEF depends on the support of the government and its interest to use the Fund effectively for co-financing other government priority initiatives.

Source: Adopted from “Review and Assessment of the Bulgarian National Trust Ecofund”, ReREP/, 2003.

As experience shows, good governance often brings additional resources and also new responsibilities. Thus, it is particularly important that the institution is staffed with highly qualified people with sufficient environmental and financial expertise, sharpened in the field, recruited on a competitive merit basis. These are professionals who share the same values and work ethics. In addition, personal characteristics of individual staff members, their understanding of the institution's mission and objectives, and their personal commitment are crucial to the success of the institution. An ability to attract dedicated, competent staff, specially a strong Executive Director is crucial. The examples of both the Polish and Bulgarian Ecofunds show that the Funds have become "centers of professional excellence" and through their work have also contributed significantly to building capacity in project preparation in their respective country.

Project cycle management

A domestic financial institution would need to have an established project cycle with clearly defined stages, responsibilities, procedures and project selection criteria.

The typical stages of a project cycle of a public funding institution are:

- Identification of potential projects;
- Submitting applications;
- Appraisal and selection of submitted projects;
- Approval of selected projects;
- Contracting and financing of projects (transfers of money);
- Monitoring and evaluation of projects and of post-implementation results.

Because of the underdeveloped market for environmental investments in many debtor countries, good projects may not be easy to find. Hence, any institution managing an expenditure programme financed by a swap would have to be very proactive in the identification of eligible and promising projects in each priority area. Owners of these projects would need to be clearly informed about funding opportunities and conditions. Otherwise, they may not apply and the project pipeline could remain empty.

Some applicants may need assistance in the preparation of their projects and in submitting good applications, especially in the first years of operations of the scheme. However, it is important that applicants have equal access to information and assistance. Assistance provided to some applicants only creates unfair competition and should be avoided. Such a situation may also distort the development of the market for independent consulting services in project preparation. Instead, technical training in project preparation and application for funding, open to all potential beneficiaries, could be organised and financed by the institution.

Procedures and criteria for appraisal and selection of projects will be the cornerstone of credibility, accountability and transparency of the scheme to various stakeholders. Good international standards of project appraisal in the public sector will need to be followed, such as those contained in the OECD Council Recommendation on Good Practices for Public Environmental Expenditure Management (OECD, 2006a) and the Handbook for Appraisal of Environmental Projects Financed from Public Funds (OECD, 2007). The principles and criteria of project appraisal and ranking need to

be defined in the institution's Charter and further specified in operational terms in documents approved by the governing body.

Good international practices show that effective appraisal cycles have fixed intervals and deadlines for submitting applications by applicants and for making decisions by the institution. The frequency will need to be adjusted to the practical needs of the project pipeline. Large, capital investment projects may need to be appraised in two stages – in the first stage, short and relatively simple applications are screened against eligibility criteria in order to reject non-eligible projects early in the process and save time and resources of both the institution and rejected applicants. Applicants who pass this first eligibility test are then asked to prepare a more detailed application and submit all supporting documentation (e.g., feasibility studies, environmental impact assessments, environmental and construction permits, etc.).

After projects are appraised and then ranked by the executive body, the governing body receive the entire, ranked project portfolio for final approval, with merit-based written justifications for each project. It is advisable that the governing body have the right to veto individual projects, but not the right to modify the sequence of projects on the ranking list or to add new projects, by-passing technical appraisal. This practice is strictly followed by the Polish EcoFund, for example and it produces credible results.

After approval of projects by the governing body, actual financing to the beneficiary would be provided on the basis of a contract negotiated with and signed between the beneficiary and the appropriate party on the government side. It is advisable that disbursement of larger amounts for investment projects be made after the project has been implemented, and only upon original invoices issued by the implementing firm/contractor, which in most cases will be different from the beneficiary. Experience shows that making advance payments is not a good practice and should be avoided in principle, and if applied, must involve strict safeguards against diverting money by beneficiaries to purposes other than those agreed in the contract.

The responsibilities of the financial institution managing DFES need to include monitoring of project implementation and *ex post* evaluation of results achieved. In order to prevent non-compliance of the beneficiary with the terms and conditions agreed in the contract and be able to recuperate its resources, it is advisable that the institution retain the contractual right to terminate the agreement and envisage instruments which allow it to revoke its funds.

Preparing annual financial reports according to international accounting and reporting standards makes the financial institution more transparent and credible. Activity reports can also be prepared annually to allow for a fair assessment of performance of expenditure. In addition, the institution can only gain more reputation if its financial reports are regularly audited by international independent chartered accountants and international organisations. All this helps to make the institution better understood and appreciated by both the domestic and international community.

International experience shows that regardless of the legal form of the institution, the project cycle produces best results when it is managed according to written, transparent procedures and when project appraisal criteria are objective and unambiguous. Using cost-effectiveness indicators as a quantitative basis for appraisal is key to ensuring a fair selection of projects. For larger investment projects, a two-stage appraisal gives best results. These requirements are crucial for making the institution and its staff efficient and accountable and assuring creditors that their money is used to buy environmental benefits at the lowest possible costs in the country.

Disbursement mechanisms

Because of external benefits and common goods provided by the projects to be supported under the debt-for-environment swap scheme, financing will need to be raised on terms more favourable than those available on the market. “Soft” financing can be provided in a variety of forms, such as direct grants, low interest loans, high risk loan guarantees or equity with low expected return and higher accepted risk.

From the point of view of financial sustainability of the domestic institution, it would be attractive to use **direct loans** to disburse its resources. Loans could provide some return on assets to replenish the fund. Moreover, loans to projects that have the potential to generate financial revenue can give project owners incentives to implement projects quickly and efficiently. The Bulgarian National Trust Ecofund has been using this instrument in its practices.

However, the use of loans, loan guarantees or equity financing would require significant capacity to manage associated risks. The needed capacity could be built within the institution by establishing a loan department with at least two to three experienced credit analysts to analyse the creditworthiness and collateral of borrowers. Capacity can also be bought on the market by contracting out credit analysis to commercial banks for a fee (and for some risk sharing). Without up-front capacity, a loan portfolio usually quickly turns into a stock of worthless assets. Effective lending would also require a critical mass of legal and institutional infrastructure in the country for arbitrage and contractual settlements, to say nothing of the minimum level of maturity of financial markets. All these conditions are still under development in most low-income countries. Therefore, grants maybe a more appropriate instrument to use in such cases.

A **direct grant** is the most transparent form of government financing, the least risky and the easiest to manage. In the European tradition of public finance, it is also considered the most market-friendly form of government financing, because it does not compete with financial products provided by the private financial sector. During the first few years of operation, the financing institution could accumulate experience with financial management, contracting, project appraisal and implementation monitoring. This would provide time to better understand the situation on the environmental investments market, typical funding needs of projects and risks. Should conditions allow, the governing body could consider introducing other disbursement instruments, such as soft loans or interest subsidies.

To maximise its environmental effectiveness, the financial institution can use its limited resources to mobilise additional finance for environmental improvements. A DFES institution should never finance 100% of project costs. Co-financing needs to be required to achieve financial leverage and additionality. This could be done by providing matching grants covering only a limited portion of the project financial needs. The share of the grant in the eligible project cost (the rate of assistance) may be different for different projects, depending on the priority area, type of project (e.g. its capacity to generate revenues), and type of beneficiary. Criteria for determining the maximum grant rate need to be relatively simple and transparent. Temptations to use sophisticated and costly models (e.g. incremental cost as used in GEF grants) need to be cautiously treated and considered after sufficient experience and capacity is accumulated in-house. Annex 3 contains a simple matrix of a possible differentiation of the rates of grant support. These are provided for illustration only.

Procurement rules

A financial agreement between the institution and beneficiaries should always include a clause on the procedure to purchase goods and services financed by the swap resources.

Competition and **non-discrimination** for any party are the recommended rules of procurement. These are seen as tools that can help achieve transparency and cost-effectiveness in purchasing goods and services financed by the swap.

Some creditors may insist on limiting competition in procurement to their own suppliers (e.g. purchase of equipment produced only in the creditor country). However, this would most likely increase project costs significantly. This implies some trade-offs between efficiency and the incentives to creditor countries to make swap transactions.

The debtor country needs at least to insist on allowing competition between domestic and creditor country firms. Otherwise development objectives of the scheme would be jeopardised. Moreover, if more than one creditor agrees on a swap, the government may propose procurement procedures similar to those of the Polish EcoFund, where competition is open to both Polish firms and firms from all countries participating in the swap (OECD, 1998). This so-called *ex post geographical distribution rule* - widely applied in the European Union (EU) programmes - offers every participating creditor a possibility to recapture (in the form of contracts) some share of the funds foregone. Even though this is not a perfect solution, geographical distribution of contracts is a more efficient alternative than tied procurement, and it has proved viable in EU practice (Zylicz, 1992). The important difference between "geographical distribution" and "tied procurement" is that the former is established *ex post* and the latter *ex ante*, thus, they have different incentive effects.

In conclusion, whatever the choice of the institutional arrangement, it is important that the institution is managed by local staff, selects projects for financing on a competitive basis and builds capacity of both managers and applicants as the best way to ensure sustainability of environmental protection in the country.

Major lessons learnt

Early decision on governance issues related to the management of the DFES resources is crucial for the design of the swap and the successful outcome of the negotiations with creditors. The institutional arrangement needs to be tailored to the specifics of the swap but it should be flexible enough to accommodate any additional swaps if such are arranged in the future. Accountability, transparency and cost-effectiveness should be the cornerstones of the governance policy of the institution. Based on the experience of the Polish and Bulgarian Ecofunds, some of the important lessons related to governance include:

- Bilateral swaps have the potential to generate more resources than trilateral swaps implemented with support by intermediaries.
- The institutional options for governance and management of the expenditure programme should be carefully analysed in light of the existing legal framework in the country, the stream of revenues (amount, period) and the nature of the project pipelines.
- Both the ministry of environment and the ministry of finance should be involved in the design and management of the entity that will monitor the implementation of the expenditure programme.

- The administrative costs of managing the DFES should be weighted against the potential annual flows under the DFES. Experience shows that these administrative costs should not represent more than 5% of the annual revenue. These costs should be taken into account before decision to establish a dedicated institution to manage and monitor the DFES is made.
- Creditors should be convinced that the debtor country has the capacity and is committed to manage their money in an efficient and accountable way. This will require the development of clear and transparent rules and procedures for selecting, financing and monitoring the most cost-effective projects in the pipelines. The Good Practices for Public Environmental Expenditure Management developed by the OECD provide guidance to set such rules and procedures, based on the best international practices.
- Debt swap facilities should be centers of “professional excellence”, in order to maintain creditors' trust and, eventually, attract additional finance (including additional debt swaps). There are many examples world-wide that good governance and effective expenditure management attract public and private finance.

CHAPTER 5. CONCLUSIONS

Experience shows that a debt-for-environment swap is a relevant mechanism for low-income countries facing difficulties with servicing their external debt. DFES can help simultaneously reduce fiscal stress, stimulate economic growth and increase domestic resources available for environmental protection.

When preparing a DFES, special attention should be paid to macroeconomic issues. Debt repayment problems, potential developments in GDP, balance of payments and public investments should be carefully monitored in order to ensure that the country will have the fiscal capacity to service the debt swap agreement. A thorough and rigorous analysis of the debt portfolio is key to estimating the potential revenues of the swap and securing the support of the Ministry of Finance and potential creditors.

The experience of countries successfully implementing DFES schemes shows that irrespective of the institutional set-up for managing DFES resources, creditors should be convinced that the country will have institutional capacity to manage foreign expenditure in a transparent, effective and efficient manner in accordance with good international practices. Early decision on governance issues is crucial for the successful outcome of the negotiations with creditors. The institutional arrangement needs to be tailored to the specifics of the swap (e.g., its size, duration, nature of project pipelines) but it should be flexible enough to accommodate any additional swaps (if such are arranged in the future) or additional sources of finance (which are usually needed to implement the expenditure programme, particularly to support larger project pipelines).

For this purpose, a well-justified and narrowly-focused expenditure programme based on transparent and robust project selection criteria and implementation rules and procedures should be developed. Establishing a credible expenditure programme that responds to priority concerns of both creditors and the debtor country will be essential to gain support for a debt-for-environment swap. The proposed programme should demonstrate how a solid pipeline of projects could be prepared and supported to meet its environmental objectives together with poverty reduction, local economic development and sustainable growth and international security goals.

Preparation for real transactions and financial transfers under the debt-for-environment swap scheme is never short, easy and cheap. The best results are achieved when there is broad political support within the government. In order to be effective, the preparatory process needs a strong, dedicated leader. The ministry of finance, working closely with the ministry of environment, could provide this leadership. The ministry of finance is crucial in this process as it leads the negotiations with creditors. The ministry of environment can build the case for a DFES, emphasising the economic, environmental and social benefits that can be obtained through such a deal.

Some of the major milestones in the preparatory and implementation process with the split of possible roles among different actors that a debtor government may wish to take into consideration are outlined in Table 2 below. As the process unfolds, a more detailed planning and budgeting should be prepared and the planning completed.

Table 2. Major milestones in the preparatory process for debt-for-environment swap

Action	Timing	External cost (Currency)	Responsible for	Sources of financing
1. Prepare a pre-feasibility study for the DFES. The analysis should include as a minimum: debt profile and debt sustainability of the country, identification of the most promising creditors and estimation of the potential revenue stream, identification of initial priority areas for support from the potential DFES resources, consideration of the potential governance structure for managing the resources. Hire experienced consultants, as necessary.			MoE + MoF	
2. Launch a process of official multi-stakeholder national and international consultations, using the pre-feasibility study as a background document.			MoE + MoF	
3. Conduct additional analysis (expenditure programmes, institutional issues). Apply for technical assistance to donors or international institutions (e.g. World Bank, UNDP).			MoE	
4. Launch informal consultations with targeted creditor countries.			MoF+MoE	
5. Begin formal negotiations with the first creditor(s).			MoF	
6. Sign first memorandum(s) of understanding with selected creditor(s).			MoF	
7. Introduce provision for a DFES into the consolidated balance of financial resources and main directions of budgetary policy established by the ministry of finance and the National Bank, as a preparation of the next year's budget.			MoF+ National Bank	
8. Prepare feasibility study with business plan, detailed institutional design and investment opportunities analysis.			MoE	
9. Sign first swap agreement(s).			MoF	
10. Adopt enabling legal and regulatory framework including the charter of the financial institution.			Cabinet + Parliament	
11. Include the DFES into the next year's Budget Law. Alternatively, the budgetary commitments can be included into the debt-conversion treaty with the creditor.			MoF + Parliament	
12. Establish a financial institution (or other appropriate institutional arrangement), office, equipment, recruit staff.			MoE	
13. Train staff, develop detailed project cycle manual, internal operational documents, software and other operational tools.			MoE+MoF	
14. Start project cycle – first project identification period, information campaign, training for applicants.			Financial institution	
15. First application period.			Financial institution	
16. First appraisal session.			Financial institution	
17. First financing agreements and beginning of implementation of first projects.			Financial institution	
18. First disbursements to projects.			Financial institution	

Note: MoE – Ministry of Environment, MoF – Ministry of Finance.

REFERENCES

- Andrews, D., *et al.* (1999), “Debt Relief for Low Income Countries. The Enhanced HIPC Initiative”, *Pamphlet Series*, No. 51, IMF, Washington.
- Cottarelli, C. and P. Doyle (1999), “Disinflation in Transition 1993-97”, *Occasional Paper*, No. 179, IMF, Washington.
- Devarajan S., V. Swaroop, H. Zou (1996), “The Composition of Public Expenditure and Economic Growth”, *Journal of Monetary Economics*, Vol. 37.
- EBRD (European Bank for Reconstruction and Development) (2006), *Transition Report 2006*, EBRD, London.
- GEF (Global Environmental Facility) (2002), *The Challenge of Sustainability, An Action Agenda for Global Environment*, GEF, Washington.
- Helbling, T., A. Mody, R. Sahay (2004), “Debt Accumulation in the CIS-7 Countries: Bad Luck, Bad Policies or Bad Advice?”, *Working Paper*, No. 04/93, IMF, Washington.
- IMF (2002), Joint Press Release of the World Bank, Asian Development Bank, European Bank for Reconstruction and Development, and the International Monetary Fund, Ministers Endorse International Initiative for Seven Poor Countries of the Commonwealth of Independent States, *Press Release*, No. 02/23, April 20, 2002, IMF, Washington.
- IPG (Interagency Planning Group) (2000), *The Current Situation and Capacity Building Needs of Environmental Funds in Africa, Preliminary Assessment*. IPG on Environmental Funds, by Meelissa Moye with Ruth Norris, IPC, New York.
- Mathieu P. (2004), *The Sustainability of Public External Debt in the Five Highly-Indebted CIS Countries* (A Background Paper for the CIS-7 Initiative).
- Moye M. (2001), “Overview of Debt Conversion”, Debt Relief International Ltd, *Publication*, No. 4.
- Odling-Smee J. and J. Linn (2001), *Armenia, Georgia, the Kyrgyz Republic, Moldova, and Tajikistan: External Debt and Fiscal Sustainability*, IMF/World Bank, Washington.
- OECD (Organisation for Economic Co-operation and Development) (1998), *Swapping Debt for the Environment: The Polish EcoFund*, OECD EAP Task Force, Paris.
- OECD (2005), *Pre-feasibility Analysis, Project Pipelines and Institutional Support for Debt-for-Environment Swap in the Kyrgyz Republic*, OECD, Paris.
- OECD (2006a), *Council Recommendation on Good Practices for Public Environmental Expenditure Management (C92006)84*, OECD, Paris.

- OECD (2006b), *Debt-for-Environment Swap in Georgia: Pre-Feasibility Study and Institutional Options*, OECD, Paris.
- OECD (2006c), *Debt-for-Environment Swap in Georgia: Potential Project Pipelines for the Expenditure Programme*, OECD, Paris.
- OECD (2007), *Handbook for Appraisal of Environmental Projects Financed from Public Funds*, OECD, Paris.
- Polish EcoFund (2002), *Debt-for-Environment in Practice, 10 Years of Polish EcoFund*, Polish EcoFund, Warsaw.
- Regional Environmental Reconstruction Programme for South Eastern Europe under the Stability Pact (REReP) (2003), *Review and Assessment of the Bulgarian National Trust Ecofund*, GTZ, Berlin.
- Sala-I-Martin X. (1996), “Transfers, Social Safety Nets and Economic Growth”, *Working Paper*, WP/96/40, IMF, Washington.
- UNCTAD (United Nations Conference on Trade and Development) (1992), *Conversion of Official Bilateral Debt*, GE.92-55494, UNCTAD, Geneva.
- UNDP (United Nations Development Programme) (1998), *Debt for Environment Swaps for National Desertification Funds: An Introductory Guide*, UNDP.
- UNSO (UNDP's Office to Combat Desertification and Drought) (1997), *Mobilizing Resources for National Desertification Funds through Debt-for-Environment Swaps*, UNSO.
- World Bank (2003), *Global Economic Prospects*, World Bank, Washington.
- World Bank (2006), *Global Development Finance*, World Bank, Washington.
- Zylicz, T. (1998), “Debt-For-Environment Swap as a Game: The Case of the Polish EcoFund”, *Nota di Lavoro*, 69.98, Fondazione Eni Enrico Mattei, Milano.
- Zylicz, T. (1992), “Debt-For-Environment Swaps: the Institutional Dimension”, *Beijer Institute Discussion Paper*, Stockholm.

Useful Web-Sites

- Bulgarian National Trust Ecofund: www.ecofund-bg.org
 GEF: www.gef.org
 IMF: www.imf.org
 OECD: www.oecd.org
 Paris Club: www.clubdeparis.org
 Polish EcoFund: www.ekofundusz.org.pl

ANNEXES

Annex I: Examples of bilateral debt-for-environment swaps (in USD, end of 2003)

Creditor country	Debtor country	Date	Face value debt treated	Environmental funds paid
Argentina	USA	1993	38,100,000	3,100,000
Bangladesh	USA	2000	31,301,857	8,500,000
Belize	USA	2001	8,584,692	9,289,560
Bolivia	Germany	1997	3,700,000	1,150,000
Bolivia	Germany	2000	15,800,000	3,200,000
Bolivia	Switzerland	1993	35,400,000	1,365,000
Bolivia	USA	1991	38,400,000	21,800,000
<i>Bolivia Total</i>			93,300,000	27,515,000
Bulgaria	Switzerland	1995	16,200,000	16,200,000
Chile	USA	1991	39,000,000	1,400,000
Chile	USA	1992	147,000,000	17,300,000
<i>Chile Total</i>			186,000,000	18,700,000
Colombia	Canada	1993	12,800,000	12,800,000
Colombia	USA	1992	310,000,000	41,600,000
<i>Colombia Total</i>			322,800,000	54,400,000
Costa Rica	Canada	1995	16,600,000	8,300,000
Costa Rica	Netherlands	1996	14,100,000	14,100,000
Costa Rica	Spain	1999	5,222,302	2,180,594
<i>Costa Rica Total</i>			35,922,302	24,580,594
Ecuador	Germany	2002	9,500,000	3,081,400
Ecuador	Germany	2002	10,200,000	3,235,770
Ecuador	Switzerland	1994	46,300,000	4,524,000
<i>Ecuador Total</i>			66,000,000	10,841,170
Egypt	Switzerland	1995	121,000,000	18,000,000
El Salvador	Canada	1993	7,100,000	7,100,000
El Salvador	USA	1992	335,000,000	25,600,000
El Salvador	USA	1992	279,000,000	15,600,000
El Salvador	USA	2001	38,400,000	14,000,000
<i>El Salvador Total</i>			659,500,000	62,300,000
Guinea Bissau	Switzerland	1995	8,400,000	400,000
Honduras	Canada	1993	24,900,000	12,450,000
Honduras	Germany	1999	1,068,442	534,221
Honduras	Switzerland	1993 & 1997	42,030,000	8,430,000
<i>Honduras Total</i>			67,998,442	21,414,221

Jamaica	USA	1991	271,000,000	9,200,000
Jamaica	USA	1993	134,400,000	12,300,000
Jamaica Total			405,400,000	21,500,000
Jordan	Germany	1995	13,400,000	6,700,000
Jordan	Germany	1995	22,700,000	11,300,000
Jordan	Germany	2000	43,600,000	21,800,000
Jordan	Germany	2001	11,300,000	5,700,000
Jordan Total			496,400,000	67,000,000
Madagascar	Germany	2002	25,092,262	14,843,007
Madagascar	USA	1996	27,000,000	12,000,000
Madagascar Total			52,092,262	26,843,007
Nicaragua	Canada	1993	13,600,000	2,700,000
Peru	Canada	1994	16,210,000	354,919
Peru	Finland	1996	24,620,000	3,679,020
Peru	Germany	1995	20,150,000	6,089,810
Peru	Germany	1999	5,140,000	2,060,000
Peru	Germany	1999	5,140,000	2,060,000
Peru	Switzerland	1993	131,000,000	32,700,000
Peru	USA	1997	350,000,000	22,844,235
Peru	USA	2002	28,315,096	10,604,003
Peru Total			580,575,096	80,391,987
Philippines	Germany	1996	5,800,000	1,800,000
Philippines	USA	2002	41,380,000	8,224,143
Philippines Total			47,180,000	10,024,143
Poland*	Finland	1990	17,000,000	17,000,000
Poland	France	1993	66,000,000	66,000,000
Poland	Italy	1998	32,000,000	32,000,000
Poland	Norway	2000	27,000,000	27,000,000
Poland	Sweden	1997, 1999	13,000,000	13,000,000
Poland	Switzerland	1993	63,000,000	63,000,000
Poland	USA	1991	370,000,000	370,000,000
Poland Total			588,000,000	588,000,000
Syria	Germany	2001	31,700,000	15,900,000
Tanzania	Switzerland	1993	25,600,000	190,000
Tunisia	Sweden	1992	1,342,000	1,342,000
Tunisia	Sweden	1993	477,300	477,300
Tunisia Total			1,819,300	1,819,300
Uruguay	USA	1992	1,000,000	93,400
Uruguay	USA	1992	33,400,000	6,100,000
Uruguay Total			34,400,000	6,193,400
Vietnam	Germany	1996	18,200,000	5,400,000
Vietnam	Germany	1999	16,400,000	5,000,000
Vietnam	Germany	2001	7,000,000	
Vietnam Total			41,600,000	10,400,000
GRAND TOTAL			3,568,073,951	1,084,702,382

Source: Adopted from Melissa Moye.

* The Finnish swap was not administered by the Polish EcoFund.

Annex II: Selected Paris Club creditors' debt reduction programmes

Creditor programme	Eligible debt	Swaps completed in debtor countries	Use of debt swap proceeds	Additional information
Canada Canadian International Development Agency Debt Conversion Initiative for Environment and Development	ODA debt	Latin America mostly	Environment and sustainable development projects Bilateral trust funds established	
France Agence française du développement Libreville Fund (Fonds de conversion de créances pour le développement) Polish EcoFund	ODA debt and export credits	Africa Poland (1993)	Productive activities, local development, social projects, environmental protection, privatisation, public sector restructuring, staff re-education, training Environment	1% of debt = USD 48 million
Germany Ministry for Economic Cooperation and Development (BMZ) and the German Development Bank (KfW) Debt conversion programme	ODA	Mostly Latin America and Africa	Education, environment and natural resources, poverty alleviation	Funding for programme allocated by German Bundestag each year
Italy Debt-for-environment Polish EcoFund		Poland	Environmental protection and biodiversity	
Netherlands Debt-for-development and environment	ODA debt Commercial debt bought back from private creditors	Africa, Latin America, Asia	Mostly conservation and environment	
Sweden Debt-for-environment/aid Polish EcoFund		Tunisia, Costa Rica Poland (1997)	Environmental protection and biodiversity	2% of Poland's debt cancelled = USD 6.5 million
USA US Treasury Polish EcoFund	ODA debt owed to USAID	Latin America Poland (1991)	Environment, child survival Environmental protection and biodiversity conservation	10% of debt cancelled = USD 367 million

Annex III. Possible co-financing rates per project type

Table III.1 below suggests possible options for the range and type of co-financing that can be provided to different recipients for different types of projects. It is expressed as a share of the grant in eligible project costs. Eligible costs will need to be defined in the Charter of the institution that will manage the potential DFES resources. The table below serves only to indicate how the rates of the grant can be differentiated and presented. The values contained in the table are for illustration only.

Table III.1: Possible options for the range and type of grant co-financing provided to different recipients for various types of projects (as percent of eligible project cost)

Project area Recipient	Biodiversity			Climate change			Water resources protection			Capacity building		
	I*	II	III	I	II	III	I	II	III	I	II	III
Central government	0%	75%	75%	0%	50%	75%	0%	50%	75%	0%	75%	85%
Local authorities	0%	75%	75%	0%	50%	75%	0%	50%	75%	0%	75%	85%
Utilities (e.g., water utilities, district heating companies)	0%		75%	0%		75%	0%		75%	0%		85%
Budgetary institutions (e.g., schools, hospitals)	0%	85%	75%	0%	50%	75%	0%	50%	75%	0%	85%	85%
Non-governmental organisations	0%	85%	75%	0%	50%	75%	0%	50%	75%	0%	85%	85%
Private sector	0%	50%	75%	0%	50%	75%	0%	50%	75%	0%	50%	85%
Private sector: small and medium enterprises, small farmers, community groups	25%	50%	75%	25%		75%	25%		75%	25%	50%	85%

* I – potentially commercial; II - cost-recoverable; III - non-commercial

Annex IV: Glossary of major terms

Additionality: New investment generated through debt conversion. Debt-equity swaps can be used to promote foreign investment in priority sectors of the economy and to stimulate privatisation or non-traditional exports. Debt-for-aid/environment swaps can attract additional donor assistance.

Agreed Minute: Participating creditor countries and the debtor country usually sign an Agreed Minute at the end of a negotiation Paris Club session. This is not a legally binding document, but a recommendation by the heads of delegations of Participating creditor countries to their governments to sign a bilateral agreement implementing the debt treatment. When there are only a few creditors concerned, the Paris Club agreement is exchanged through mail between the Chair of the Paris Club and the government of the debtor country, and is called "terms of reference". In some cases, the multilateral debt agreement has also been called "memorandum of understanding".

Bilateral (official) debt: Loans owed to bilateral creditor governments. Official Development Assistance (ODA) loans are typically owed to aid agencies. Publicly guaranteed loans (mostly export credits) are owed to export credit agencies (ECAs).

Charter: A legal document similar to Articles of Incorporation or a Deed of Trust, but used specifically in the case of an entity which is established by an act of the country's legislation or an executive decree of its President, King, etc. (as opposed to an entity which is set up solely by private individuals or groups in civil society).

Commercial credits: (i) Credits granted by a bank or a supplier to a debtor country for importing goods and services. When these credits are guaranteed by the appropriate institution of a Paris Club creditor, they are included in the claims treated in the context of the Paris Club. (ii) Non-ODA credits are sometimes referred to as commercial credits.

Concessional debt: Applies to any credit whose grant element is higher than 25%. The grant element reflects the credit terms of a credit operation: interest rate, the maturity and grace period. The grant element of a loan is measured by giving the loan a present value on the basis of an actualisation rate, conventionally fixed by the OECD at 10% for the whole period of the loan.

Consolidation: Change of the terms of debt payment obligations. This can be implemented either through a change of the terms of the existing debt ("rescheduling"), or through the exchange of the debt for a new instrument (notably, through "refinancing").

Cut-off date: When a debtor country first meets with Paris Club creditors, the "cut-off date" is defined and is not changed in subsequent Paris Club treatments and credits granted after this cut-off date are not subject to future rescheduling. Thus, the cut-off date helps restore access to credit for debtor countries facing payment difficulties.

Debt-for-aid/development swap: The cancellation of external debt in exchange for funding for development projects (child development, education, health, conservation/environment, etc.) in the debtor country. Also often called debt-for-development.

Debt-for-equity swap: The cancellation of external debt in exchange for equity investment in a domestic company or privatised public enterprise.

Debt-for-nature (environment) swap: The cancellation of external debt in exchange for local currency that is used to finance conservation or environmental protection projects.

Debt reduction: In the context of a concessional treatment, creditors may usually choose among a number of options to provide the required debt reduction in net present value. When the creditor chooses the "debt reduction" option, the net present value reduction is achieved through a cancellation of part of the claims.

Debt swap (conversion, exchange): The cancellation of external debt, typically at a discount from face value, in exchange for payment in local currency or another asset (bonds, privatised public assets, etc.). The terms "conversion", "exchange" and "swap" are used interchangeably.

Discount from face value: Percentage of reduction from the face value of debt. The inverse of the discount is the purchase price or the redemption price. Also referred to in colloquial terms as the "haircut".

Domestic debt: Debt owed to residents of the country concerned.

Eligible debt: Debt that may be treated in the context of a Paris Club agreement.

Endowment fund: A fund which invests its capital and uses only the income from those investments to finance its activities.

Emerging markets debt market: Also called the secondary debt market for trading of commercial debt owed by developing country governments. Emerging markets refers to low-and middle-income countries that are pursuing political and economic reforms and a more complete integration into the global economy.

Exit rescheduling: An exit treatment is the last rescheduling a country normally gets from the Paris Club. The aim is that the debtor country will not need any further rescheduling and will thus not come back for negotiation to the Paris Club.

Face value: The original amount of loans owed under a loan or other credit agreement, prior to debt rescheduling or reduction. Also referred to as the nominal value of debt.

Flow treatment: A standard Paris Club agreement provides a way of tiding a debtor country through temporary balance of payments difficulties during a given period of time. This is referred to as a flow treatment, as opposed to a stock treatment.

Foreign debt (= external debt): Debt owed to non-residents of the country concerned.

Goodwill clause: Clause by which Paris Club creditors agree to consider further debt relief for a borrower's debt servicing obligation falling due after the expiration of the consolidation period under a previous rescheduling agreement. The willingness is conditional upon the complete implementation of all previous bilateral agreements as well as the debtor's continuation of its arrangement with the IMF.

Heavily Indebted Poor Countries (HIPC) initiative: Launched in 1996, the HIPC initiative is an agreement by the international community to help poor countries with good policy performance to escape from unsustainable debt burdens by providing comprehensive debt relief. The enhanced HIPC framework, agreed in 1999, lowers the qualifying criteria, speeds up the delivery process and creates an explicit link to poverty reduction.

Inflationary effect: A side effect produced by the release of large amounts of currency into the local financial market. If the amount of money increases in a country, people have an easier or cheaper access to money and therefore tend to buy more (increased demand). If the demand for goods and services increases, prices increase, if prices increase, salaries tend to go up, if salaries go up, prices follow, etc. and this generates inflation.

Moral hazard: In economics and ethical theory, the term moral hazard is used for any situation in which a person or an organisation does not bear the full adverse consequences of its actions. The possibility that the signal or expectation of possible future government support may induce an undesirable change in behaviour by management of an enterprise or bank, for example by engaging in more risky activities because some of the potential losses are seen as being effectively underwritten by the government.

Multilateral debt: Debt owed to multilateral organizations, such as the World Bank, regional development banks, and other multilateral and intergovernmental agencies. Excluded are loans from funds administered by an international organisation on behalf of a single donor government (these are classified as loans from governments).

Multilateral Debt Relief Initiative: This initiative was launched in 2006 by several international financial institutions (World Bank, IMF, African Development Fund). The initiative allows forgiving 100% of eligible outstanding debt owed to these institutions by all HIPC countries which have reached the completion point of the HIPC Initiative. The initiative is intended to help the HIPC countries advance towards the achievement of the Millennium Development Goals. The Inter-American Development Bank joined the initiative in early 2007.

Net present value (NPV): The net present value (NPV) of debt is a measure that takes into account the degree of concessionality. It is defined as the sum of all future debt-service obligations (interest and principal) on existing debt, discounted at the appropriate market rate. Whenever the interest rate on a loan is lower than the market rate, the resulting NPV of debt is smaller than its face value.

Non-Paris Club creditors: Debt owed to bilateral creditors that are not members of the Paris Club of creditors.

ODA credits: "Official Development Assistance" ("ODA") credits are defined by the OECD as credits with a low interest rate and aimed at development.

Official creditor: This covers a) official bilateral creditors (governments or their appropriate institutions), including Paris Club members; b) multilateral creditors (international institutions such as the IMF, the World Bank or regional development banks).

Paris Club: The Paris Club is *an ad hoc* group of official bilateral creditors that meet once a month to negotiate rescheduling agreements with debtor countries. The French Treasury serves as the Secretariat for the Paris Club.

Participating creditor countries: The creditor countries that sign an Agreed Minute. They are members of the Paris Club or other official creditors.

Purchase price: The price in percentage terms paid to purchase debt from a creditor. The purchase price is the inverse of the discount from face value.

Redemption price (rate): The price in percentage terms at which debt is converted into another asset.

Refinancing: Creditor countries may choose to apply the terms of a Paris Club agreement either through a refinancing (they make a new loan that is used to repay the existing debt) or through a change of the terms and conditions of the existing debt (rescheduling).

Revolving fund: A fund that provides for the receipt of new resources on a regular basis – such as proceeds of special taxes designed to pay for conservation programmes – which can replenish or augment the original capital of the fund and provide a continuing source of money for specific activities.

Round-tripping: Re-conversion of local currency debt conversion proceeds into hard currency for illegal gain. By converting a debt, you help the indebted country to save hard currency. But if you change the debt conversion proceeds that you have received in local currency back into hard currency, the initial beneficial effects of the debt conversion on a country's balance of payments disappears. You have made a "round trip".

Secondary debt market: A market for trading discounted developing country debt instruments owed to commercial creditors. Also called the emerging markets debt market.

Sinking fund: A fund that disburses its entire principal and investment income over a fairly long fixed period, e.g., 10 years or more.

Stock treatment: As opposed to standard flow treatments, some Paris Club treatments apply not only to the payments falling due in a particular period of time, but to the whole stock of debt from which those payments fall due. The intention of any agreement which deals with the stock of debt in this way is to provide a country with a final treatment by the Paris Club called an exit rescheduling.

Sovereign debt: Debt owed by governments or by publicly owned agencies.

Three-party debt swap: Debt conversions involving negotiations between a debtor government, an investor and a creditor.

Trust fund (also referred to as a "trust"): A legal structure by which money or other property is held, invested, and spent by a board of trustees or board of directors exclusively for a specific charitable purpose, as defined in a charter or deed of trust. In common law countries, trust funds can also be established for specific individual beneficiaries, and be administered by an individual trustee, rather than by a board of trustees. A trust fund in this general sense can take one of several different legal forms, depending on the legal system of the country involved.