S. Hrg. 102-234

DEBT CONVERSIONS

HEARING

BEFORE THE

SUBCOMMITTEE ON DEFICITS, DEBT MANAGEMENT AND INTERNATIONAL DEBT

OF THE

COMMITTEE ON FINANCE

UNITED STATES SENATE

ONE HUNDRED SECOND CONGRESS

FIRST SESSION

MAY 10, 1991

Printed for the use of the Committee on Finance

U.S. GOVERNMENT PRINTING OFFICE

45-752

WASHINGTON : 1991

For sale by the U.S. Government Printing Office
Superintendent of Documents, Congressional Sales Office, Washington, DC 20402
ISBN 0-16-035763-2

COMMITTEE ON FINANCE

LLOYD BENTSEN, Texas, *Chairman*

DANIEL PATRICK MOYNIHAN, New York
MAX BAUCUS, Montana
DAVID L. BOREN, Oklahoma
BILL BRADLEY, New Jersey
GEORGE J. MITCHELL, Maine
DAVID PRYOR, Arkansas
DONALD W. RIEGLE, JR., Michigan
JOHN D. ROCKEFELLER IV, West Virginia
TOM DASCHLE, South Dakota
JOHN BREAUX, Louisiana

BOB PACKWOOD, Oregon
BOB DOLE, Kansas
WILLIAM V. ROTH, JR., Delaware
JOHN C. DANFORTH, Missouri
JOHN H. CHAFEE, Rhode Island
DAVE DURENBERGER, Minnesota
STEVE SYMMS, Idaho
CHARLES E. GRASSLEY, Iowa

VANDA B. MCMURTRY, *Staff Director and Chief Counsel*
EDMUND J. MIHALSKI, *Minority Chief of Staff*

SUBCOMMITTEE ON DEFICITS, DEBT MANAGEMENT AND INTERNATIONAL DEBT

BILL BRADLEY, New Jersey, *Chairman*

DONALD W. RIEGLE, JR., Michigan
CHARLES E. GRASSLEY, Iowa

CONTENTS

OPENING STATEMENTS

COMMITTEE PRESS RELEASE

PUBLIC WITNESSES

ALPHABETICAL LISTING AND APPENDIX MATERIAL SUBMITTED

DEBT CONVERSIONS

FRIDAY, MAY 10, 1991

U.S. Senate,
Subcommittee on Deficits, Debt Management
and International Debt,
Committee on Finance,
Washington, DC.

The hearing was convened, pursuant to notice, at 10:03 a.m., in room SD-215, Dirksen Senate Office Building, Hon. Bill Bradley (chairman of the subcommittee) presiding.

Also present: Senator Grassley.

[The press release announcing the hearing follows:]

Press Release No. H-19, May 6, 1991

Subcommittee Hearing Planned on Debt Conversions; Steps Sought to Aid Development, Protect Natural Resources

Washington, DC—Senator Bill Bradley, Chairman of the Finance Subcommittee on Deficits, Debt Management and International Debt, announced Monday a hearing on debt conversions and their potential to assist sustainable development and the protection of natural resources.

The hearing will be at *10 a.m. Friday, May 10, 1991 in Room SD-215* of the Dirksen Senate Office Building.

"The continuing debt crisis in many developing countries has not only depressed living standards and growth prospects but is also causing severe environmental damage," said Bradley (D., New Jersey).

"The need for export revenue to meet debt payments has worsened urban slums and destroyed irreplaceable natural resources. Pushed to produce cash crops, many countries have been cutting down trees, burning tropical forests, using and abusing pesticides and engaging in other practices leading to soil erosion, chemical contamination, deforestation, overcropping and serious environmental degradation," Bradley said.

"Recognizing the relationship between debt, economic growth and the environment, it is essential to our own welfare and that of future generations to look for solutions that contribute to sustainable development," Bradley said.

OPENING STATEMENT OF HON. BILL BRADLEY, A U.S. SENATOR FROM NEW JERSEY, CHAIRMAN OF THE SUBCOMMITTEE

Senator Bradley. The subcommittee will come to order. Americans have recently been shocked by the devastation of one of the planet's most valuable resources: the rain forests of South America. Few people, though, know why this has happened. It is not merely greed; a big part of it is also the issue that we are discussing today in this subcommittee hearing, and that is third world debt.

The debt burden facing developing countries is simply not sustainable. There is only one way for many of these countries to come up with the cash to pay and meet these burdens, and that is by destroying their natural resources.

It is a lot like the family selling its heirlooms and family jewels to pay off some unwise debt. In that case, we might be able to say, "Too bad. They should not have taken on the debt in the first place."

But in the case of developing countries in Latin America, the family treasures they are ruining are our treasures, too. They belong to the planet, and it is up to all of us to see that they are preserved for our children. I first became interested in third world debt about a decade ago; a long time. At the time, it was dismissed as an abstract issue that would show up only on a balance sheet of banks. But in the rain forest, you realize that you can see, hear, smell, and touch the effects of the debt burden. It is the wide road carved through the middle of a rain forest; it is the sound of bulldozers echoing among the chirps and squeals of immense varieties of birds and mammals living from tree to tree; it is the smell of gasoline and burning wood overwhelming the natural cycle of rot and renewal.

The debt of developing countries has soared from barely $50 billion in 1970 to an estimated $1.2 trillion last year. In many countries, there is only one word for the level of growth required to meet this debt burden, and that is unsustainable. It is unsustainable for people; it is unsustainable for the planet; and it is unsustainable, frankly, for our own economy.

How long can we keep drawing off the potential for real growth in these countries to meet debt payments before the contraction of our export markets begin to eat away at the competitiveness, health, and security of the United States?

I believe the debt burden in developing countries is already costing Americans billions of dollars in foregone exports, hundreds of thousands of jobs, and it is certainly running up a bill for future generations. The object of this morning's hearing is not to relieve the debt, per se; the object is sustainable growth. We will explore options and new ideas for debt conversions, financing, and management that will reconcile debt with the absolute requirement of sustainable growth.

The urgency of protecting the world's base of natural resources has simply got to figure into any discussion of debt management. The earth must have a place at the table, put quite simply.

At the same time, I believe that the debt crisis may offer an opportunity for all of us to build a base of security for our planet, and our future prosperity. Our two panels today consist of recognized experts on the environmental aspects of debt reduction initiatives, and debt, generally.

We are pleased they have agreed to contribute their experience and thinking on how we might turn the debt crisis into an opportunity for sustainable development. I look forward to a productive hearing, and I hope that it will be the beginning of a long effort to restore growth in developing countries at the same time that we protect our economic and environmental security. Senator Grassley.

OPENING STATEMENT OF HON. CHARLES E. GRASSLEY, A U.S. SENATOR FROM IOWA

Senator GRASSLEY. Mr. Chairman, I appreciate your efforts in trying to find solutions to the seemingly overwhelming problem of third world debt. And there is no question in my mind that this problem demands an extraordinary amount of time, attention, and money. You surely have devoted an overwhelming amount of time to this problem, and you need to be complimented for it.

President Bush and his Administration deserve some praise for the time and effort that they have expanded in this area. Secretary Brady deserves special recognition in this regard.

However, as important as this issue has become, I hope for those of us in the Congress, and even the President, and even those that are looking outside of the borders of the United States totally, that we all do not forget the tremendous debt problem that we have right here at home.

A great many—if not most—of my constituents have a difficult time understanding how and why the United States can come to the aid of foreign nations and multi-national banks with taxpayers' funds when Americans are losing their family farms or businesses and getting little, or no Federal help, especially in regard to taxes. I think it is important that our witnesses today explain the necessity of America's leadership and involvement in addressing lesser developed country debt.

But I hope that everyone interested in this problem will also be able to give us some insight into how, or whether some of the principles and strategies being applied in the foreign area can also be applied domestically.

After all, in regard to the issue of debt-for-nature swaps, many debt-laden farmers have wetlands, forests, and waterways on their lands that need to be preserved. It seems to me that we also need to be looking into ways that we can solve these debt problems, and protect the environment at the same time.

I only suggest these things, Mr. Chairman, not to throw cold water in any way on the overwhelming problems that we face world-wide, or to detract from your efforts in this area, but to make sure that witnesses, or other people interested in these issues understand that there are problems at home that need to be dealt with.

And also, there needs to be a close rationale between the domestic concerns of Americans, and their understanding, also, of our world-wide responsibilities. Thank you, Mr. Chairman.

Senator BRADLEY. Thank you very much, Senator Grassley. And there you have the dual or triple responsibilities of the panels today, to address economic and environmental concerns; economic concerns, both domestic and international.

The first panel we have today consists of Mr. Tom Lovejoy, assistant secretary for external affairs, the Smithsonian Institution, and president of the Society for Conservation Biology; Mr. Gus Speth, president of World Resources Institute; Mr. Carlos Quintela, executive director of the Fondo Nacional para el Medio Ambiente, La Paz, Bolivia; and Mr. J. Eugene Gibson, consulting attorney, Natural Resources Defense Council, on behalf of the National Wildlife Federation, and the Sierra Club.

Let me welcome all four of you to the subcommittee today. And why do we not begin with Mr. Lovejoy, and then Mr. Speth, Mr. Quintela, and Mr. Gibson.

STATEMENT OF THOMAS E. LOVEJOY, ASSISTANT SECRETARY FOR EXTERNAL AFFAIRS, SMITHSONIAN INSTITUTION, AND PRESIDENT, SOCIETY FOR CONSERVATION BIOLOGY, WASHINGTON, DC

Mr. LOVEJOY. Thank you, Mr. Chairman. I would, if I may, like to simply submit the written testimony for the record.

Senator BRADLEY. It will be in the record in full, and I thank all of the witnesses today for coming and sharing your views.

[The prepared statement of Mr. Lovejoy appears in the appendix.]

Mr. LOVEJOY. I first became interested in the complexity of the relationship between debt and environment while sitting in a hearing in 1984 when it became quite clear to me that two things were linking debt and environment in Brazil, in particular.

One was the efforts to straighten out the overall economy of Brazil that resulted in cut-backs in the Park Service, and other related agencies, which needed to pay attention to deforestation in the Amazon. Second there was just a literal flood of colonists into the Western Amazon caused by changes in land use in the south of Brazil, in the end, really driven by Brazil's desperate need to generate foreign exchange. I do not think either of those problems, in any sense, has diminished; if anything, they are greater today. And the loss of tropical forests in Brazil, while it is down from a couple of years ago, is still an enormously large figure. The loss of biological diversity represented by that is without precedent in our history as a species.

These are resources which represent fundamental resources in support of human society which can reach out and affect the way medicine is practiced in this country, or agriculture, in fact, is managed in this country.

And there are also the linkages through the loss of forest cover to the problems we are struggling with in terms of maintaining a stable composition to the atmosphere and global climate. In the end, the tropical forests really are not that far away from us.

In any event, if one thinks about Brazil and the notion of debt-for-nature conversion, which came out of my listening to that hearing, it is clear that within the last year there has been an important change in Brazilian Government attitude.

The rhetoric has moved from the defensive—the sort of "it is none of your business" kind of rhetoric—to rhetoric that actually has a rather genuine ring to it. But when it actually comes down to improvements on the ground, they are still marginal. That is not entirely because of lack of financial resources, but in large degree, because of lack of financial resources. Brazil really does need help from various sources. The G-7 are talking about a project with Brazil.

In the end, I think Brazil also must consider the financial opportunities presented through debt conversion. Brazil has done debt-for-equity swaps in the past. There is no reason that I can see that Brazil should not convert a small portion of its staggering debt to deal with these environmental problems.

And I would think this is a particularly good time for this country to discuss these kinds of problems with Brazil, since with the U.N. conference on environment and development coming up in about 14 months, Brazil should be very eager to show some real progress on matters of the environment.

One of the things I would like to say is that while I have been pleased by the debt-for-nature swaps that have occurred to date, in a sense, I am disappointed that it has moved so slowly, and that the total amount has been so modest.

There are various barriers in terms of just the technical details of working these things out. I believe Michael Chamberlain will address some of these later on. And it is still not as attractive to an American banking institution to actually donate a piece of debt, as it is to find a buyer. And I am sure Lamond Godwin will be able to address that small but very critical difference later on.

I think what worries me most is seeing not only the important conservation opportunities slipping through our fingers as each year thousands and thousands of square kilometers of tropical forests disappear, but also seeing opportunities for debt conversion slipping through our fingers.

Every time our Government decides to forgive debt, as in the case of Egypt, the opportunity to do something for the environment through this means is lost. I firmly believe we need to try to find ways to make environment an integral part of debt restructuring and debt negotiations. It is, in the end, in everybody's interests.

I would like to also comment briefly on the administration's initiative of Enterprise for the Americas and the creation of the environmental trusts. There are various problems about it in terms of conditionality.

The linking of certain economic requirements may well mean that the countries which need the environmental help the most will be the last to qualify. There really needs to be some flexibility built into all of that.

But I also would just like to point out that in the end, the amounts involved potentially in those environmental trusts are still modest, in themselves. And those trusts expire after 15 or 20 years, whatever the original maturation date of the particular debt is. They expire and they vanish.

And one thing that is so clear in these countries is this lack of institutional stability. And if there is some way to use debt-for-nature, or, indeed, the environmental trusts of Enterprise for The Americas to create endowments for some of these institutions—public and private—we will have made a major contribution to securing the environmental future, in particular, of this hemisphere.

So, those are my initial comments, and I would be very happy to address any questions.

Senator BRADLEY. Thank you very much, Mr. Lovejoy. Mr. Speth.

STATEMENT OF JAMES GUSTAVE SPETH, PRESIDENT, WORLD RESOURCES INSTITUTE, WASHINGTON, DC

Mr. SPETH. Mr. Chairman, Senator Grassley, it is a pleasure to be here with you this morning. I am very pleased that you are linking debt and the environment. I recall that once our organization sponsored an event on Capitol Hill and we invited a senior official to address the issue of debt and the environment. And the person came and addressed debt, and addressed the environment, but did not address the linkage between the two. I am glad we are here today to do that.

Over the past year, it has been my pleasure to serve as Chairman of the Task Force on International Development and Environmental Security. It was convened last year by the Environmental and Energy Study Institute.

This task force included among its members five Members of Congress, including Senators Kasten and Pell, and 16 leaders from business, science, labor, development, and academic groups, including Dr. Lovejoy.

Our task force recently issued its report, and one of our main conclusions was that a new era of international cooperation is needed urgently to address the link of economic and environmental challenges facing developing countries.

We also concluded that the United States should play a leading role in bringing this new era into being, and that given the huge challenges facing developing countries and the United States' stake in helping to meet those challenges, our country needs a new integrated program to cooperate with and assist developing countries.

Today we lack such a program, our task force concluded, and we made 12 recommendations for specific initiatives which, taken together, would constitute such a new program of U.S. cooperation and assistance with developing countries on both economic and environmental issues.

In this context, the task force agreed unanimously that developing country indebtedness is one of the issues deserving highest priority in this new U.S. program. The final report of the task force, which was just released earlier this week, recommends that the United States undertake a bold initiative to reduce the pressure on natural resources in the developing countries by reducing their indebtedness.

I would like to submit for the record if I might, Mr. Chairman, the relevant portions of this report entitled, "Partnership for Sustainable Development."

Senator BRADLEY. They will be in the record in full.

Mr. SPETH. Thank you.

[The information appears in the appendix.]

Mr. SPETH. In my brief statement this morning, I want to summarize this specific initiative. Many specialists on world finance have urged debt reduction by the international community as essential to the health of the world economy.

The task force supports this rationale, but we further urge debt reduction on the grounds that it is essential to make economic development environmentally sustainable, and essential—as I will describe in my testimony—to meeting global environmental challenges of immediate and direct interest to all Americans.

Americans are justifiably concerned today about the world-wide environmental threats confronting us: threats such as global climate change, the loss of the planet's bio-diversity, and the deterioration of the natural resources needed to feed rapidly expanding populations around the world.

These problems simply cannot be solved without the full cooperation of the developing countries. Yet, these countries cannot confront these global environmental problems with us if domestic environmental problems are taking all their available effort, and they cannot confront their own domestic environmental problems if their national economic and social challenges are overwhelming. The heavy burden of external debt is one of the principal reasons the economic and social challenges facing so many developing countries are, in fact, overwhelming.

The task force, therefore, recommended that the United States urge the establishment of an international debt management authority by a consortium of industrial or aid-giving nations with the purpose of purchasing significant debt obligations of selected countries on the secondary market.

The authority would negotiate with the debtor countries in question on the forgiveness of those debt obligations gradually over a period of years in return for the adoption of policies and programs supporting sustainable development, and conserving globally important resources, such as forests and climate.

The international debt management authority recommended by the task force would be similar to the authority proposed by the Congress in the Omnibus Trade and Competitiveness Act of 1988. I will not go through the details of that, but clearly both of you will remember that initiative which was launched by the Congress, but not pursued into fruition.

The major difference, however, is that the policy reforms and other initiatives required for debt relief under this proposal of the task force would emphasize issues involving environmentally sustainable development, rather than conventional resource utilization criteria.

Depending on the nature of the indebted nation's needs, the policies that would be encouraged through this approach would include, for example, the implementation of national plans to stem and eventually reverse deforestation; appropriate energy pricing and least-cost energy strategies; a strategy for reducing population growth; land tenure reform; measures to raise the legal, social, and economic status of women; and manufacturing strategies emphasizing job creation.

The debt obligations would be forgiven over a period of years on the basis of performance on agreed sustainable development criteria. The emphasis on these policy reforms related to environment and natural resources conservation reflects the growing realization that market-based economic policies cannot succeed unless the requirement of environmental sustainability is explicitly integrated into these strategies.

The task force recognizes that these policy reforms would not only be politically difficult in many cases, but costly for cash-strapped developing countries to undertake. Therefore, the powerful incentives created by this program, and supplemental support through the multilateral lending institutions and the bilateral aid agencies, would be essential.

The cost of such an authority would depend on the scope of the program. It could start small and expand as it succeeded if it, indeed, did succeed. Japan, the European Community, and the other OECD members could be expected to provide perhaps 80 percent of the cost, while the United States would provide the remainder.

The purchase of debt on the secondary market provides a high degree of leverage for the amount invested. For example, the authority could buy $100 billion of developing country commercial debt at face value debt for, perhaps, $30 billion at the current secondary market prices. Spread out over a few years and appropriately leveraged, this need not be an intolerable burden on our treasury.

But I think it is important that we recognize that it would cost something, and that we are responding to a national and international need, and not bailing out the banks as we do this.

We feel that this approach of debt reduction in return for sustainable development policy reforms offers a series of very powerful benefits. Economically, the debtor countries would obviously benefit, but so would the U.S., since about 40 percent of our export markets are in these countries.

Environmentally, the proposal offers the type of powerful support that is going to be needed if tropical forests are going to be saved, and if global climate is going to be protected. I hope that all members of the Congress and leaders in the private sector will come to see developing country debt relief as an investment—a wise investment in our own nation's economic future, and in global environmental security.

All Americans concerned about the future of the planetary environment should support initiatives aimed at turning international debt from a force of destruction into a positive force for sustainable development and global environmental protection.

In conclusion, let me mention that we also proposed an option—and I think a very attractive one—for funding this and other programs that are needed for global environmental protection and sustainable development.

The task force addressed this funding option in Recommendation No. 9, which calls for the adoption by the Congress of energy and pollution taxes, such as a gasoline tax, or a tax on carbon dioxide emissions, which would make the price of energy more closely reflect this environmental and security cost to our country.

A market-based U.S. energy strategy would reduce our emissions of pollutants, including carbon dioxide; it would strengthen U.S. energy efficiency; it would promote renewable and other alternative sources of energy; reduce our dependence on imported oil from volatile regions; and have other benefits. We proposed, Mr. Chairman and Senator Grassley, that virtually all of the revenues generated through such a system of taxes on energy and pollution, should be returned to consumers through reductions in income and payroll taxes.

This approach thus has the added benefit of shifting a share of the U.S. tax burden from good things that we want to encourage, like labor and investment, onto bad things that we want to discourage, like pollution and waste.

Only a very small fraction of the revenue that could be generated in this way would be needed to finance the initiatives recommended in the task force report. I think that the task force report shows that there are creative approaches to the challenges of international development and environmental security that are well within our national capabilities, and that do not require significant new national sacrifices.

I hope this Subcommittee and the full Committee will consider the recommendations of the task force, both on the international debt authority for sustainable development, and in the area of energy and pollution taxes, both for the sake of our own energy future in this country, and for the sake of the global climate and sustainable development in the Third World. Thank you very much.

Senator BRADLEY. Thank you very much, Mr. Speth, for a very interesting testimony. Mr. Quintela.

STATEMENT OF CARLOS QUINTELA, EXECUTIVE DIRECTOR, FONDO NACIONAL PARA EL MEDIO AMBIENTE, LA PAZ, BOLIVIA

Mr. QUINTELA. Thank you, Mr. Chairman.

Senator BRADLEY. Welcome to the Subcommittee.

Mr. QUINTELA. Thank you very much.

Senator BRADLEY. You want to pull the microphone a little closer.

Mr. QUINTELA. Yes. Thank you. I am very pleased to be here, Mr. Chairman, and Senator Grassley, and to have the opportunity to tell you a bit about our thoughts on the relationship between debt and the environment in Latin America. I have submitted a written testimony that I would like to request be included in the record.

Senator BRADLEY. It will be in the record in full.

Mr. QUINTELA. Thank you very much.

[The prepared statement of Mr. Quintela appears in the appendix.]

Mr. QUINTELA. I agree entirely with your and Senator Grassley's comments. The issue here is certainly sustainable growth, and it is a global problem. There is really nothing we can do in Bolivia for the environment without taking a very close look at poverty—its causes and consequences. A country like Bolivia cannot afford to make simple decisions on the preservation of a particular species or ecosystem if it does not benefit the population in the long run. The system just does not have enough slack.

The relationship between debt and the environment is not direct. It is a two-part problem: the relation between debt and poverty, and the relation between poverty and the environment. Reducing poverty is, thus a key element in Bolivia's Environmental program. After all, poverty is, perhaps, the major cause of environmental degradation. Populations over-utilize the resources and damage the environment to the point in which it is more expensive to restore it than it is to preserve it the first place.

In Bolivia debt-for-nature swaps can pontentially play a very important role reducing poverty and its effect on the environment. Our objective is to improve the quality of life of all Bolivians by protecting and utilizing sustainably the ultimate resource base: nature.

Bolivia is a very good example of the effect of debt on the economy and on the environment, although we have a relatively small amount of debt—about $3.4 billion—the impact of this debt on the country's economy has been devastating.

In 1989, for instance, the per capita debt was larger than the per capita income. With those figures in mind, you can see that for us, debt-for-nature swaps represent a significant opportunity to reduce debt and invest in the environment.

Now, in Bolivia we have gone a long way to reduce our foreign debt simply because we have had no choice. We had to be very creative to reduce 70 percent of our commercial debt, and close to $1 billion of the bilateral debt. But that is not enough. We need to continue to pursue opportunities that will allow us to direct our scarce financial resources back into the country to promote economic growth in a way that it is sustainable in the long term.

Debt-for-nature swaps specifically have had a significant impact on conservation and sustainable development, but we must make them a very important tool to also deal with the economic issues associated with the service of the foreign debt.

If you may recall, Bolivia was the first country to do a debt-for-nature swap in 1987, and we have learned quite a bit about the procedures on how to go about making them successful. And one of the points that Dr. Lovejoy mentioned is one of ones that have concerned us the most.

Debt-for-nature swaps are an instrument to accomplish an objective, and the objective can only be met if there are solid institutions, and strong local organizations to capitalize on this opportunity.

This is the reason we have been working very hard at creating the institutional framework that will allow debt-for-nature swaps to be an effective tool to strenghten and advance the Bolivian environmental program. That is how the National Fund for the Environment came about. As you can see, the idea of debt-for-nature swaps is evolving rather rapidly from being ad hoc transactions for specific projects, to become another instrument to advance more complex and comprehensive conservation and sustainable development programs.

The National Fund for the Environment has been created precisely to harness all that interest and resources and direct them to accomplish long-term objectives. The fund has been very well received in Bolivia at all levels, including the President of the Republic who has taken a very personal interest in making sure that the fund serves a useful purpose for Bolivia as a whole.

The institutional framework is beginning to take shape, in a way that incorporates broad participation from government and private sectors. For instance, the fund has a board that includes not just government agencies, but also private organizations.

On the private side is LIDEMA, the league of conservation organization, FAN, the organization that is managing the Parks in

Peril program being supported with U.S. funds, thanks to the efforts of the Congress, and the Confederation of Indigenous Organizations. We, as a government, have recognized that we do not have to have all the answers. We must open the decision-making process to the participation of everyone involved.

Bolivia's commercial debt accounts for only 6 percent of our total external debt. We owe approximately $200 million to private banks. Thus, the potential for commercial debt swaps to finance both conservation and sustainable development projects is rather limited.

For this reason, when the announcement of the Enterprise for The Americas was made we were, needless to say, very pleased. It opened the possibility of doing bilateral debt swaps with the $400 million that Bolivia owes the United States.

I want to use this opportunity to thank you for creating that opportunity for us. The United States is leading the way, and we hope, within the framework of the fund, to make sure that whatever gets started with the U.S. will encourage other creditor countries to consider bilateral debt-for-nature swaps. Our fund has been designed specifically to attract investments of this type.

Now, the Enterprise for The Americas Initiative, in a broader context, imposes conditions that cannot easily be met by most countries in the hemisphere. For countries like Brazil to participate, they would have to undergo serious economic reforms. In the case of Bolivia, those reforms have been taking place since 1985. In a sense, we have been pre-adapted to the requirements of the Enterprise for The Americas Initiative. Including our fund which was being designed at the time of the announcement by President Bush.

We have already submitted a proposal to the U.S. Treasury under the EAI, and we are waiting to hear their answer. We know that there are many steps that need to be taken before it is approved. But we are ready to act now. Thank you.

Senator BRADLEY. Thank you very much, Mr. Quintela, for your testimony and comments.

Mr. Gibson.

STATEMENT OF J. EUGENE GIBSON, CONSULTING ATTORNEY, NATURAL RESOURCES DEFENSE COUNCIL, ON BEHALF OF THE NATIONAL WILDLIFE FEDERATION AND THE SIERRA CLUB, WASHINGTON, DC

Mr. GIBSON. Mr. Chairman, Senator Grassley, I thank you for the opportunity to discuss debt conversions and their potential to assist sustainable development and the protection of natural resources. This testimony is also submitted on behalf of the National Wildlife Federation and the Sierra Club. I would request that our prepared statement be made part of the permanent record.

Senator BRADLEY. Your statement will be in the record in full.

Mr. GIBSON. All right, thank you.

[The prepared statement of Mr. Gibson appears in the appendix.]

Senator BRADLEY. And if you can summarize, that would be fine. Take your time and do what you like.

Mr. GIBSON. I understand, time is fleeting. Our testimony today focuses primarily on the debt-for-nature component of the administration's Enterprise for the Americas Initiative. The other speakers have quite eloquently laid out the link between the debt crisis and environmental degradation. In this regard, I would comment that debt-for-nature swaps have helped focus attention on the link between the debt and the environment. Moreover, debt-for-nature swaps afford an effective mechanism for a few non-governmental organizations to finance conservation programs in the highly indebted countries.

There are limits, however, to how much debt NGO's can afford to buy. The $100 million converted so far is insignificant compared to the magnitude of the developing countries' external indebtedness—over $1.3 trillion—and their environmental financing needs.

Consequently, we need to consider how the debt-for-nature concept can be expanded. The debt-for-nature component of the Enterprise for The Americas Initiative is one such mechanism for expanding the concept.

As you know, the EAI legislation passed by the 101st Congress contained in the 1990 Farm Bill authorizes the Administration to restructure the P.L. 480 Food-for-Peace debt for eligible Latin American and Caribbean countries.

S. 553 and H.R. 964, now pending in Congress, expand the EAI to include Foreign Assistance Act Debt, and track the language in the Farm Bill. NRDC, the National Wildlife Federation, and the Sierra Club, support the principle of debt relief linked with initiatives that set debtor countries on broad-based environmentally sustainable development paths. For these reasons, we support the administration's proposal to link reduction of bilateral debt with the establishment of local currency environmental funds. Although we welcome the attention focused on the Western Hemisphere, we believe that at some point, similar debt reduction strategies should be offered to other regions.

In this regard, we are pleased that Poland's debt relief program has an environmental component. We would welcome the opportunity to work with Congress and the administration in defining the details of this program, which we hope will involve significant NGO participation.

The EAI debt reduction legislation for P.L. 480 debt provides a useful model for restructuring the FAA debt. We believe, however, that some refinements are necessary. Our statement provides a detailed critique of the EAI, and proposes five recommendations, which I will now summarize.

One, a mechanism to determine whether the International Monetary Fund and World Bank macroeconomic conditionality requirements will have an adverse impact on the poor and the environment.

Two, clarification of the investment reform conditionality requirement and consideration of environmental concerns in the development of an Inter-American Development Bank investment reform lending program.

Three, a broad range of non-governmental organizations serving on the Environment for the Americas board, and a clear preference for host country NGO's in the award of grants from the environmental funds.

Four, encouragement of commercial bank donations to the environmental funds. In this regard, we are especially disturbed by a proposed IRS rule which will have a chilling effect on not only potential commercial bank debt donations, but on any donation for international charitable activities.

Five, an environmental review of the projects to be funded by the Export/Import Bank and Commodity Credit Corporation debt swaps.

In addition to the EAI, the U.S. Government can promote other debt-for-nature mechanisms. Specifically, the U.S. Agency for International Development could provide increased grant assistance to NGOs for commercial debt purposes for debt-for-nature swaps.

Also, the U.S. Government should support Multilateral Development Bank financing for debt buy-backs for environmental purposes. In particular, we hope the administration supports a debt-for-nature pilot program the Inter-American Development Bank is developing. Such effort is mandated by Section 512 of the International Development and Finance Act of 1989.

Finally, natural resource management initiatives should be incorporated into Brady plan debt reduction agreements. We are disappointed that the administration has failed to do this, despite congressional mandates in the Foreign Operations Appropriations Act for fiscal year 1990.

I will conclude my remarks by saying that the time has come for the governments and NGO's in the North and South to strike a global bargain to address the twin problems of debt and environmental degradation. The debt-for-nature concept, if expanded, could help achieve this bargain. Thank you.

Senator BRADLEY. Thank you very much, Mr. Gibson. Let me thank all members of the panel for their testimony. And we will limit our questions to five minutes, and then we will alternate every five minutes.

Mr. Lovejoy, if you could, give us some sense of what is at stake here. You talked about the financial opportunities of debt conversion for developing countries in some kind of sustainable development.

So often, these countries are presented with the choice of destroying their rain forests in order to get foreign exchange to pay debt, or continuing the inability to deal with the debt crisis and lower standards of living in their countries. How might a country make money, at the same time, not destroy the rain forest? Can you make money in the rain forest?

Mr. LOVEJOY. Well, it is both a short-term and a long-term response to that. The short-term response is that there are certain rain forest products for which there are already markets, which are simply extracted from the forest without destroying it.

Although some people would contest it, there are, in fact, ways to selectively log in tropical forests and take the particularly valuable timbers out and get economic return and still have forest.

Those are the kind of short-term things that need to be developed and encouraged so that the people already living in those forested regions have a reasonable way to make a living without destroying forests.

The longer term is, in fact, of enormous promise as we enter the age of biological engineering when a set of genes from one organism can be put into another and create an extremely valuable product, whether it is an enzyme, or whatever it may be.

The tropical countries have the majority of the genetic capital, but they do not have the technological know-how for biotechnology, and obviously, they have limited financial capital. And it seems to me in the long run there could be enormous gains made by some form of joint venturing where genetic capital comes from the tropical countries, and technology, financial capital comes from a country like our own. The income thereby generated could be split in some equitable way between the two.

Senator BRADLEY. So you see that kind of cooperation as a way to explore the diversity of the rain forest for essentially pharmaceutical purposes?

Mr. LOVEJOY. For pharmaceutical purposes, but it can go beyond pharmaceutical. It can go into things which can be of benefit to agriculture, which has its own diseases, et cetera.

Senator BRADLEY. It think it is very difficult for many people to understand in the United States how the rain forests of South America are directly relevant to their lives. You have thought about this an awful lot.

If you were speaking before an audience of skeptical Americans about the need to protect the rain forests, what would you say to them that would convey your own sense of why protecting the rain forest is important to a shoe store salesman in Iowa City and Elizabeth, New Jersey as it is to someone living in Minaus.

Mr. LOVEJOY. Well, what I would do is offer some extremely concrete examples of how many people's daily lives are affected by products from the tropical rain forest. Just to start with, almost every major abdominal operation in this country uses a muscle relaxant that comes straight out of the Amazon forest: it is not a compound which has been successfully synthesized in pharmaceutical laboratories.

Further, the preferred prescription drug for high blood pressure in this country stems from biological knowledge of how the venom of a particular poisonous snake in the Amazon forest works.

So, literally tens of millions of people are living healthier, longer, and more productive lives, and contributing to GNP because of products that come out of these forests.

Senator BRADLEY. And you probably have a list that goes on, and on, and on of examples of that, but I think that those two are very good examples which clearly would not have been developed had there been no rain forest, or had the rain forest been destroyed.

Mr. LOVEJOY. Exactly. And, in fact, in one of the drugs being used on the President at the moment is not a tropical forest drug, but it is originally a tropical country drug derived from foxglove native to Asia.

Senator BRADLEY. Senator Grassley.

Senator GRASSLEY. This hearing is obviously on the United States' leadership in this area, and what we do about debt owed to us. But I am also interested in knowing what some of our major trading competitors, such as Japan or Germany, are doing in regard to providing debt relief in return for protecting the environment. Because we know that Japan, for instance, has a very interesting record of restructuring aid to future trade rather than merely providing help. Could any of you provide information on this? And also, how you see the United States going it alone in regard to this, or whether we would be more successful in doing it multilaterally.

Mr. SPETH. Senator Grassley, I can just provide a bit of information. I think there are others who could provide more. My general impression is that many of the European governments—particularly with regard to the quite substantial debts owed to them from African countries are taking very major strides at debt relief and debt reduction.

Japan, on the other hand, in my view, is moving very slowly on this front. I am not an expert on that, but that is my impression. I read recently a statement by Prime Minister Kaifu, which was quite negative on the subject of debt reduction. And so, I think there is a way to go in Japan.

With regard to your last question, certainly the proposal of our task force that I presented to you today was very much a multilateral proposal in which the other major aid-giving countries, or industrial countries of the OECD, would be participants.

Mr. LOVEJOY. If I might add to that, the Japanese a year or two back offered to buy up all of Brazil's foreign debt in return for rights to do anything they wished in the Amazon Basin, and the Brazilians turned that down, thank goodness.

I do know that Swedish Foreign Aid has contributed cold cash to debt-for-nature in Costa Rica, and I have with me a booklet prepared by the International Man and Biosphere Program which summarizes most of the debt-for-nature activities to date, which we will provide to you.

[The information appears in the appendix.]

Mr. LOVEJOY. It also talks about sort of co-opting all debt-for-nature through the Man and Biosphere mechanism, and I am not proposing that.

Senator GRASSLEY. Maybe it would lead to a philosophical point of view that I would ask you your thoughts on, and I am asking you what your point of view is. Do you think that this is something that the United States should unilaterally do for the good that it will accomplish, or because you believe that if the United States takes a major lead in this, it is going to bring these other nations along? And in the final analysis do you think that bringing the other nations along is essential towards the success?

Mr. LOVEJOY. Well, if I may offer an answer to that. I think it is important to think about both aspects; both what can be done immediately because some of these problems are very pressing, and which we can make a contribution to by unilateral action. But I think it is also extremely important to try and bring along other nations, and I do understand that this has been discussed on at least one occasion in the G-7 meetings.

Senator GRASSLEY. All right.

Mr. QUINTELA. Although we have not had much success with the Japanese, either, we will continue to see how we can work with them. Europeans, on the other hand, have been very interested in this type of transactions.

But going back to what I think is the key issue, you can have any number of financial mechanisms, like debt swaps, but it is a national level institutional and programmatic framework that will ultimately turn those opportunities into reality.

The United States has been very helpful to us in setting up the fund, which will allow us to go to many donors, to seek their support. The leadership of the United States in helping us create the proper institutional framework will allow us to realize potential opportunities with other countries.

Senator BRADLEY. Mr. Quintela, if you could, tell us specifically what is the fund, how is it created, and what has it done?

Mr. QUINTELA. The idea of the fund got off the ground in January 1990 when President Paz announced the Pause for the Environment, or La Pausa Ecologica. The idea of La Pausa, or the Pause, was to stop all the timber concessions for 5 years.

And you have to look at it in the context of what it meant; Bolivia earns $40 million a year in timber exports. And for a country the size of Bolivia, that is no small change.

Shortly after the pause was announced the idea began evolving into the broader issue of sustainable development. The environmental problems of Bolivia are not limited to logging. They are rooted on the misconception that we must destroy in order to grow. With the Pausa, we have reformulated our position in search of a new style and conception of economic development. We want to make sure that economic development takes place for a very, very long time, in harmony with the environment.

One of the things that the Pausa calls for is the establishment of alternative mechanisms to expand the pool of financial resources available. So we have designed the fund to be a multi-account fund. We are going to be handling each donor separately so that each account will have a great deal of autonomy, and we can engage in bilateral negotiations with one country without affecting what we do with another country.

One important characteristic of the fund is that it is open to NGO participation. It is unprecedented, at least in the governments that I am familiar with, to allow NGO's to participate directly in the decisions of how government money is spent. We call that the privatization of government money, and I think that will go a long way.

Senator BRADLEY. Examples of NGO's that sit at the table?

Mr. QUINTELA. The Board of Directors has three NGO's: The League of Conservation Organizations (LADEMA), the Fundacion Amigos de la Naturaleza (FAN), and the Indigenous Confederation (CIDOB). Now, each account will have their own board, and then the rest of the NGO's could participate in a given account.

Senator BRADLEY. And the fund does?

Mr. QUINTELA. Well, the fund raises money, manages money, and then it provides technical support to the smaller groups that require technical assistance in order to participate in the programs.

Senator BRADLEY. Mr. Gibson and Mr. Lovejoy referred to problems with the IRS regulation. What is the IRS regulation that troubles you, Mr. Gibson?

Mr. GIBSON. This is a proposed rule which appeared in the Federal Register on March 12, 1991 at page 10395, and it would control how taxpayers allocate tax deductions for charitable contributions.

Tax deductions for contributions used inside the United Sates would be allocated entirely to U.S.-source income; and deductions for contributions used outside the United States would be allocated entirely to any foreign-source income.

Now, taxpayers prefer to allocate deductions against domestic source income, and the proposed rule will have a discriminatory effect on international charitable activities. This goes just beyond any potential donation from a commercial bank for a debt-for-nature swap to any corporate contribution for any international activity. We believe this rule should not be adopted and that there should be no discrimination among charities based on the locale in which they work, or the end use of the contribution.

Senator BRADLEY. Would anyone else like to comment on this regulation?

Mr. LOVEJOY. Well, I would only say that in contemplating trying to comply with it, it becomes a nightmare.

Senator BRADLEY. The thought is that, therefore, what charity will buy up debt; nobody will donate debt. Is that the idea?

Mr. GIBSON. Yes, sir. But it goes just beyond the idea of debt-for-nature. It goes to any international program that any U.S. non-profit is doing. Nevertheless, it will clearly have a totally chilling effect on debt donations for debt-for-nature.

Senator BRADLEY. Mr. Speth, I was particularly interested in your comments on the need for less tax on things we like, such as income, and more tax on things that we do not like, such as pollution. Would you expand on that? I mean, is this a big source of revenue, in your perspective?

Mr. SPETH. Mr. Chairman, I think it is, and I think this idea is beginning to catch on, not only among some people in this country, but also in Europe.

There was a recent study done by Dale Jorgensen and Peter Wilcoxsen for the Environmental Protection Agency, and it estimated that a $60 a ton carbon dioxide tax would reduce U.S. carbon dioxide emissions by 20 percent—carbon dioxide being the principal greenhouse gas contributing to the climate change threat. We could reduce CO_2 emissions by 20 percent between 1990 and the year 2005 at a cost of 1.6 percent of U.S. GNP.

And this relatively low cost, given the risks involved and the benefits to be realized, would, in part, stem from using the roughly $76 billion in annual revenues that such a carbon tax would generate. $76 billion. That money in their model and their scenario was plowed back into reducing other taxes, and principally, as I recall, the payroll tax reductions.

Senator BRADLEY. Well, what does a $60 per ton carbon tax mean on a gallon of gasoline?

Mr. SPETH. About $.15—15 cents a gallon.

Senator BRADLEY. So you could take that money and provide a tax cut for middle income taxpayers.

Mr. SPETH. Absolutely. And in that way, you minimize the impact on the economy and you minimize impact on middle and low income consumers. It is basically just an effort to increase U.S.

energy efficiency, reduce our vulnerability to imports, contribute to pollution reduction, and make our tax system more equitable and more stimulative of the economy.

There have been estimates in our current tax system that by putting a burden on savings and labor creates tens of billions of dollars a year drag on GNP.

Senator BRADLEY. Yes. Senator Grassley.

Senator GRASSLEY. Mr. Speth, before I ask you a question, I notice that your Task Force Recommendations 9 and 10 support renewable fuel initiatives. And along that line, I want to tell you I strongly agree with what you have said about moving away from fossil fuels towards these renewable fuels. Along that line, and in relationship to the President's energy conservation and national energy policy, the President did leave out one recommendation from the Energy Department. The White House cut it out.

Senator Daschle and I have introduced legislation on a production tax credit for the production of renewable fuels, and it also extends the business investment tax credit so that that would put that program then back into what the White House deleted out. And I guess I would like to take this opportunity to call that to your attention, to maybe ask you for your support of that recommendation.

Mr. SPETH. I will make a point of looking at it, Senator.

Senator GRASSLEY. All right. That will be S. 466. My question would be—to kind of challenge you on a point that I think you are making on page 6—where you talk about the benefit to the U.S. economically because we have 40 percent of our export markets with developing countries, that this debt reduction then would be a good investment for us, besides the ecological benefits that would come from the swap.

I would like to know why you think—not disagreeing with you entirely, but the assumption that we are going to benefit economically—that these economic benefits will flow to the United States whereby I think that some of the benefits are going to flow to other trade competitors.

Mr. SPETH. Well, I think we always have to watch out for our competitors, and there is no guarantee that we would capture the benefit of the increased growth in the developing world that these measures would promote. There would be no guarantee.

I think with the degree to which our economy today is linked with the developing world's economy, however, if they grow and our enterprises are aggressive about capturing a share of that growth through increased U.S. exports, it could have a tremendous effect on the U.S. economy.

There have been estimates made of what the slow growth in the developing world due in part to the debt crisis has cost the U.S. in terms of jobs in the 1980s.

The right figure is in our report, but as I recall, it is almost 2 million jobs that have been lost in the United States that would have been created if the developing world had, in fact, grown during the decade of the 80s as it was doing prior to the debt crisis.

Senator GRASSLEY. Well, I do not dispute that, because a billion dollars worth of increased foreign trade would bring 25,000 new jobs to Americans. I accept your response. I guess that would bring me back to a point that was implicit in my first question during the first round, and that is that the United States' leadership is very important, and there would be some good accomplished even if the United States were the only nation to do this.

But I wonder if we do not get more bang for our buck spending our energy on pushing it multilaterally. Then not only do you accomplish more by getting everybody involved, but then the economic benefits are going to flow proportionately to the respective countries. Maybe not direct proportion, but somewhat proportionately to the countries involved.

Because I do not think that we may benefit as much as others. We would do the investment, accomplish the ecological good that would come from it, but probably not benefit economically as well as some other countries that do not have the investment.

Mr. SPETH. I do understand your point. I think one thing that is worth bringing out is that if you look at the various proposals that have been mentioned by the panel, we are talking about a menu of options for linking debt reduction and sustainable development and environmental protection. Some of those make a lot of sense to do unilaterally, it seems to me, and some make sense to do on a hemispheric basis. And I think that some—including the recommendation that I put forward from the task force—make sense mostly in the context of broad multilateral approach.

Senator GRASSLEY. Thank you.

Senator BRADLEY. Let me thank the panel very much for your testimony. I think that it is extremely helpful, and I appreciate you taking the time, and I hope that you would be available for follow-up at some point. Thank you very much.

The next panel consists of Michael Chamberlin of Sherman & Sterling in New York, and Lamond Godwin, senior director of American Express Bank, Ltd. New York.

Mr. Chamberlin, Mr. Godwin, welcome to the subcommittee.

Mr. CHAMBERLIN. Thank you very much.

Mr. GODWIN. Thank you.

Senator BRADLEY. We look forward to hearing your testimony. If you can give us a 10-minute version, and then we will get into questions. Mr. Chamberlin, the floor is yours.

STATEMENT OF MICHAEL CHAMBERLIN, SHEARMAN & STERLING, NEW YORK, NY

Mr. CHAMBERLIN. Thank you. Mr. Chairman, I am very pleased to be here today to discuss debt-for-nature swaps. I will briefly explain why they have not been more prevalent, and then suggest how debt-for-nature can be encouraged in the context of the Brady Initiative to reduce the external debt owed by the lesser developed countries ("LDC's") to commercial banks.

By way of introduction, I am a partner in the New York law firm of Shearman & Sterling, and led our representation of the Bank Advisory Committee in connection with Mexico's recent financing package under the Brady Initiative.

Since 1987, I have also advised the World Wildlife Fund and the Smithsonian Institution on a pro bono basis in the area of conservation finance. My views today, however, are solely my own, and do not necessarily reflect those of my law firm, or of my banking or conservation clients.

I believe that debt-for-nature as a concept is a brilliant one, and I applaud the handful of them that have been completed. But I am extremely frustrated by the failure of debt-for-nature to catch on and realize its full potential.

In the mid-1980's, commercial investors recognized that an LDC's debt could be bought from some commercial banks at a discount, and then re-sold to the debtor LDC at a profit, provided that the proceeds of the swap were kept in local currency and invested in the LDC country itself.

These purely voluntary transactions would enable banks to reduce their exposure to the LDC; would permit LDC's simultaneously to reduce their overall levels of debt and to encourage commercial investment; and would allow commercial investors to purchase their investment funds more cheaply than through the normal foreign exchange markets.

At about the same time, Tom Lovejoy first suggested the opportunity to direct a portion of the savings obtained from debt reduction to the promotion of conservation.

Although implementing these swaps initially proved somewhat difficult from a legal standpoint, these legal problems proved resolvable so long as all parties shared a strong commitment to complete their specific transaction.

If all parties—the debtor countries, the creditor banks, and the conservation groups—seem to benefit from these swaps, and the legal barriers can be hurdled, why are debt-for-nature swaps not more prevalent?

I think there are several obvious reasons. First, as a general rule, many LDC's do not seem to like them very much, partly because of perceived macroeconomic problems, and partly because of a common suspicion of schemes that are promoted by foreigners.

In my view, this criticism is unjustified, but nevertheless, as a result, debt-equity and debt-for-nature swap windows seem to open and close unpredictably. Although some LDC's are notable exceptions, such as Bolivia, Costa Rica, Ecuador, and the Philippines, in most countries there are few actual swaps, because no local constituency can effectively demand them. Specific transactions occur only as a result of a combination of connections, hard work, and blind luck.

Secondly, banks are reluctant to donate their debt for a variety of reasons. Those banks that are willing to dispose of their debt at all are economically better off selling it than giving it away, in part, because the current tax treatment of a donation does not provide sufficient advantages.

And I would also note the concern expressed by a prior panelist that the IRS has recently proposed new tax regulations which, I think in many cases, would further discourage debt-for-nature swaps either through donations by banks, or through the purchase of debt.

What is the likelihood that debt-for-nature swaps, absent an unforeseen breakthrough, will somehow become more prevalent in the future? Well, although the circumstances of each LDC are different, generally speaking as the LDC economies improve and their debt appreciates in value, the economic advantages of debt-for-nature are slowly deteriorating.

The window of opportunity for debt-for-nature is slowly closing in a number of countries; Chile and Mexico are very good examples. But this is not necessarily a bad thing. We should all hope, for the sake of their economies and peoples and the environment we share, that other LDC's will soon be following the Chilean and Mexican examples.

So, where does this all leave debt-for-nature?

The use of creditor government resources in the form of increased foreign aid, or reductions in bilateral or development bank debt levels can greatly contribute to conservation in the LDC's. As such, the Enterprise for The Americas Initiative is a great step forward, representing a new U.S. Government policy that expressly recognizes the critical linkage between economic and environmental measures. Economic policy-makers in the current administration now recognize that economic progress in the LDC's will be sustainable only in the context of sound environmental practices, and that environmental considerations must be integrated more effectively into the ongoing operations of the international financial institutions. In this spirit, it is clear that new ways could be found to encourage the LDC's to adopt and implement debt-for-nature, or other conservation programs.

Perhaps there is still an opportunity for debt-for-nature to be integrated into one or more of the remaining country debt financing packages under the Brady initiative, but how would this work?

Neither debt reduction, nor debt-for-nature seems to occur spontaneously. Each requires a catalyst. In the case of debt reduction, one such catalyst has been the funding provided by the international financial institutions expressly for that purpose.

Just as they have tried to incorporate greater environmental awareness into their lending policies, it is entirely appropriate that their efforts to encourage the commercial banks to reduce their debt should also include measures designed to ensure that the economic growth in the LDC's is consistent with the wise use of their natural resources.

In my written statement, I have suggested several specific alternative approaches. In each case, the point would be to create in the context of a Brady-style financing package a framework that encourages the LDC to dedicate greater resources to conservation. Those resources could be obtained by the LDC, for example, either from the proceeds of loans from the international financial institutions, or from the savings in net external transfers that would result from a successfully completed financing package.

Designing a country debt financing plan is already an extremely complicated undertaking, and it is quite ambitious to suppose that environmental concerns could easily be integrated into the Brady initiative.

But with the striking example of the Enterprise for the Americas Initiative now before us, perhaps it is time to redefine the Brady initiative to include an environmental component. Thank you. That is my statement.

I would just like to mention in response to a point made by Mr. Grassley that the State of California is, at this time, attempting to arrange a domestic debt-for-nature swap, which, if successful, would help preserve a large tract of primary forest in Northern California.

And I think that this effort indicates that the debt-for-nature technology currently being developed in Latin America does have domestic applications. [The prepared statement of Mr. Chamberlin appears in the appendix.]

Senator BRADLEY. Thank you very much, Mr. Chamberlin. Mr. Godwin.

STATEMENT OF LAMOND GODWIN, SENIOR DIRECTOR, AMERICAN EXPRESS BANK LIMITED, NEW YORK, NY

Mr. GODWIN. Mr. Chairman, I thank you for inviting me to present testimony to this very important subcommittee. I come before you today as an international banker with a special interest in engineering innovative solutions to financial, environmental, and human development problems in debt-distressed, developing countries.

I appreciate and applaud the leadership that you are providing through the work of this committee in finding and exploring solutions to these same problems.

As you may know, Mr. Chairman, American Express Bank helped to pioneer the use of debt-for-nature swaps, as well as debt-for-development swaps in partnership with the Nature Conservancy and other non-governmental organizations, such as the International Foundation for Education and Self-Help, which is undertaking debt-for-development swaps in Africa under the leadership of Leon Sullivan.

Within our company, I either initiated or coordinated each of these transactions with strong support from our Chairman, Jim Robinson, and the other senior management of our company. In most of the debt-for-nature swaps transactions, we sold debt to the Nature Conservancy at deep discounts on face value, and provided technical assistance and structuring the terms of the conversions.

In some swaps, we used debt from our own portfolio, in others, we sourced debt through the secondary market. In a few instances, we donated debt, or made cash contributions through our parent company foundation that the Conservancy and its partners used to fund conservation projects.

To date, we have assisted the conservancy to complete swaps involving debt with a face value of $11 million, that has been used to protect about 9 million acres in Costa Rica, Ecuador, Argentina, and Brazil; a number of other swaps are currently in the pipeline.

In most of these transactions, the debt acquired by TNC was converted to local currency bonds, providing an interest income stream to fund conservation activities over a long period of time.

In addition to these swaps, our company recently initiated an experiment in partnership with the Ramada Hotel chain to generate funding for conservation activities in Asia through what we call a "cause related marketing" strategy. We have agreed to donate $1 to the Nature Conservancy each time an American Express cardmember stays at a Ramada Hotel. These, and other initiatives, in support of environmental conservation, are described in a new report we released just a couple of weeks ago, called "The Greening of the Blue Box," which I am happy to make available to the committee.

I want to focus on the potential for expanding debt-for-nature swaps. As you requested, my statement will be brief, and I will focus on five interrelated points.

The first point is that from a financial point of view, there is no question that the use of debt conversions to assist in the development of conservation of natural resources in these debt-distressed LDC's makes sense.

When these transactions are properly structured, they can produce benefits for all of the parties involved; commercial banks can gain important cash and tax benefits, and at the same time, reduce their exposure to default and currency devaluation risk.

The debtor countries can reduce the strain on the scarce foreign exchange reserves, and make internal investments with money that otherwise would have gone to pay foreign creditors. Conservation organizations can leverage scarce hard currency by using these swaps.

For example, in the swaps we completed with the TNC in Costa Rica, they were able to leverage their dollar funding by a factor of 3:1. In Ecuador, they were able to leverage their dollar funding by a factor of 10:1. Moreover, by converting the debt to local currency bonds with staggered maturities, they were able to reduce the inflationary impacts in these countries.

The swaps done so far are too few in number, and too small to have much impact either on the debt problem, or on conservation problems in these countries. But they do represent an important beginning and offer a model for funding of conservation efforts that could be an important element of a comprehensive debt reduction strategy.

My second point is that there are some obstacles to the expansion of these debt-for-nature swaps that need to be addressed. I would identify three as being the major obstacles. First, would be inadequate incentives for debtor countries to support debt-for-nature swaps.

Second, the limited resources available to the conservation organizations for the purchase of debt. These organizations are the main entities interested in promoting these swaps, and to the extent that they have limited financial resources, is a significant expansion in this activity is unlikely.

Third, a major obstacle is inadequate tax and other incentives to encourage private creditor banks to donate debt for these swaps. My fourth point is that I am convinced that support for environmental conservation can, and should be a key element in all U.S. Government bilateral debt reduction strategies because debt forgiveness and debt relief are the most powerful incentives our government can offer to a debt-distressed developing country. Without powerful incentives like this, it is unlikely that these countries are going to support efforts in this area.

The environmental component of the administration's Enterprise for The Americas Initiative is an important step in the right direction because it makes available not only local currency denominated interest payments, but for the first time, Exim Bank loans, Commodity Creditor Corporation loan, and USAID debt that can be used for swap transactions.

The approach taken in the Enterprise for The Americas Initiative should be extended to the debt relief packages the administration has negotiated with Poland, and with several African countries.

Another way to provide strong incentives to developing countries would be to include conservation reform conditions in the structural adjustment programs of the IMF and the World Bank along with the traditional targets for inflation, real GNP growth, investment policy reform and balance of trade. In this regard, a portion of the recently created $1.5 billion Global Environmental Facility of the World Bank could be an important source. My fourth point is that the quickest and most effective way to expand debt-for-nature swaps would be to increase the funding available to NGO's that are the major promoters of these swaps, by expanding the amount of money in the U.S. Agency for International Development Debt-for-Development Program, and by ensuring greater access to other funding that is already in place.

For example, the $1.5 Billion Global Environmental Facility of the World Bank, has not yet been used for debt-for-nature swaps, but World Bank officials tell me they are eager to do it.

Similarly, another fund within the World Bank, which presently has a balance of about $90 million, is available for debt buy-back transactions in the IDA countries. And a portion of this money could be used for debt-for-nature and debt-for-development swaps.

The main point here is that there has been a significant increase in potential funding for these swaps, but to date, the organizations interested in swaps and the entities that have the funding have not connected, and this is a problem that needs to be overcome.

The next couple of years could see a significant increase in the number and size of these swaps. We are assisting the Nature Conservancy now to negotiate a transaction in Panama that could be a very large swap in comparison to what has been done before. This one could involve debt with a face value of $150 million.

My fifth and last point concerns the role of the private financial institutions. Commercial banks can do a number of things to assist in the expansion of these efforts.

For example, banks can provide very valuable technical assistance and advising in structuring these transactions, and navigating around the obstacles to completing these transactions in the developing countries.

You cannot minimize the significance of this role, because some of these swap transactions have been very difficult to structure, and a tremendous amount of time has been required to straighten out problems.

Another indispensable role for the banks, of course, would be sourcing the debt through the secondary market, which is controlled by the banks. There is really no other way to do that.

Banks can also assist in expanding these swaps by donating debt, or making cash contributions that could be used to buy debt or support conservation activities. I want to emphasize, however, that I am not at all optimistic about the prospects for a significant increase in the donations of LDC debt by banks. From the perspective of the banks, it makes no sense to donate debt for environmental conservation, or, for that matter, for any other purpose. Many bankers have a special aversion to the idea of forgiving the debts of what they consider to be "deadbeats."

Moreover, under existing tax and accounting regulations, selling debt and other alternatives are clearly more beneficial to banks than donations. And there are many other alternatives in addition to sales in the secondary market. Debt equity conversions, debt-for-product swaps, and even write-offs. When banks have made donations, they have done so primarily for non-financial reasons, or on the basis of non-financial considerations.

For example, in the case of my own bank, which has made donations for debt-for-nature swaps, as well as for debt-for-development swaps, we first made a decision that we wanted to support the work of the Nature Conservancy. And we then determined that we could make a larger contribution by using low value foreign debt than we could by providing a cash donation.

Even still, a complex set of factors determined which debt we would use. These factors included: the secondary market price of the paper and our predictions and expectations about the future price and value of the paper. It included considerations as to how the debt was carried on our books, both for accounting purposes and for tax purposes, and we book the same piece of paper differently for accounting purposes and tax purposes. Our long-term strategy with respect to particular LDC's; particular countries and the composition of the portfolio; the size of the donation; public relations issues; as well as the increasing interest of our parent company in environmental conservation. So, it is not a simple matter, even when you decide that you want to give debt to an NGO.

There is a widespread belief that one sure way to increase bank donations of foreign paper would be through changes in the tax and accounting treatment of foreign debt donations that would narrow or eliminate the advantage of selling the debt versus donating it, and some have proposed tax credits, and other types of enhancements.

In this regard, I want to comment on the IRS rules proposed earlier and say that if that is any indication of what is going to happen, then the trend is going in the opposite direction, because those rules will do more to discourage an already reluctant banking community from making donations.

And also in this regard, beyond the question of debt donations, these proposed IRS rules create serious problems for companies that have matching programs. For example, if an American Express employee gives money to the United Way or to the Nature Conservancy, we have to know whether or not the Nature Conservancy will use that money in a foreign country, or in the United States. If they use it in a foreign country it will have one tax consequence; if they use it in the United States, it will have a different tax consequence. So, it is a very complicated and troublesome problem we are faced with here.

Although changes in the tax code might encourage some banks to donate some of their low value, non-performing foreign debt, there will still be resistance in the banking community to taking an aggressive leadership position in advocating tax credits for this purpose, because it would have the appearance of a bail-out. The attitude in the banking communities is that the public would probably react negatively to anything that appeared to be a bank bail-out.

Some advocates, even here, have talked about including these debt-for-nature in the debt restructuring process. To date, little progress has been achieved in that area, but a breakthrough is possible if it is voluntarily negotiated and not imposed.

So, in sum, Mr. Chairman, I want to say that I believe that debt-for-nature swaps can be structured to add value to both debt reduction and environmental conservation efforts, and that these swaps should be expanded. I think the most effective way to eliminate the obstacles to this expansion would be by incorporating the environmental conservation conditionality into multilateral structural adjustment programs and bilateral debt relief and forgiveness initiatives, and through increased public and private funding to NGO's to purchase the debt of commercial banks in the secondary market, as well as the debt of the Exim Bank and the Commodity Credit Corporation. That concludes my statement, Mr. Chairman. Thank you very much.

[The prepared statement of Mr. Goodman appears in the appendix.]

Senator BRADLEY. Let me thank both of you very much for your testimony. It is wonderful to have people come before the committee who have actually done it and can convey to us the how-to, because that is really what has to happen if this is going to be serious in terms of much larger debt-for-nature swaps.

I must say your reactions, Mr. Chamberlin, when you start out saying, well, the problem is the LDC's do not like it, and the banks do not like to donate either, that is not a prescription of great hope. But I do think that you each have made a number of very helpful suggestions.

What I would like to do is I would like to pose a situation and ask you to—for the committee's benefit—work it through right here. And let us say the situation is that with Brazil we have $3 to $4 billion of government to government debt—AID, CCC, whatever—and our objective is to maximize the impact of that debt in a debt-for-nature swap. Could you go through that step one, two, three, four, five? What would we do, in your opinion, to do that most effectively? And do not feel like you are talking down to the subcommittee if you go through the very basics of the process so that we can understand the payoff, because what I think people do not see is the difference between the dollar impact and the local currency impact. So we will start with either one of you. You can draw straws, or pick. Mr. Godwin, why do you not go ahead?

Mr. GODWIN. All right. Well, I think, for example——

Senator BRADLEY. First step, second step, third step.

Mr. GODWIN. All right. The first step, of course, would be to design a comprehensive strategy which would involve not simply identifying the financial goals to be achieved, but also the conservation goals. Once the goals were established, then I think that something could be structured along the lines of what is contained in the administration's Enterprise for the Americas Initiative which involves outright forgiveness of a substantial amount of the debt—it can go up to 80 percent, I am told—and a restructuring of the remaining 20 percent to provide an interest income stream over a period of several years.

For example, the remaining 20 percent of the debt could be restructured over a 30 year period. The payment of the principal could be in dollars; the payment of the interest could be in local currency, and these resources could be used to fund conservation activities directly, or to buy additional debt for swaps and so forth.

Senator BRADLEY. You have lost me. Let us go back. So, 80 percent is forgiven.

Mr. GODWIN. Yes.

Senator BRADLEY. And that is pretty easy to understand.

Mr. GODWIN. That is a very powerful incentive to cooperate.

Senator BRADLEY. Now, the remaining 20 percent, let us say Brazil has $5 billion. So you wipe $4 billion off. Now, what do you do with the other billion dollars that is now on the bank's books?

Mr. GODWIN. All right. You restructure the terms for the repayment of this debt.

Senator BRADLEY. So that the 20 percent principal will be repaid in dollars.

Mr. GODWIN. Yes.

Senator BRADLEY. The interest will be———

Mr. GODWIN. Now are we talking about bank debt, or bilateral debt?

Senator BRADLEY. Bilateral.

Mr. GODWIN. All right.

Senator BRADLEY. Government to government.

Mr. GODWIN. All right. Governments. All right.

Senator BRADLEY. Paid in dollars, with the interest payments made in local currency. Is that correct?

Mr. GODWIN. Yes, over a period of 30 years. And this would be a burden that the country could easily carry. All of this money could be dedicated to environmental conservation activity. The local currency would generate funds that could be used directly to support conservation activity, and the main advantage of receiving the principal payment in dollars is that it would be a hedge against inflation, currency devaluations, and so forth.

Senator BRADLEY. Mr. Chamberlin, what do you think?

Mr. CHAMBERLIN. Well, I think, in a nutshell, the question you have asked and the response that you have gotten describe the situation facing the U.S. Treasury in developing the Enterprise for the Americas Initiative.

And I think the payment of interest on the remaining debt, after the reduction has occurred, in local currency is a very good way to go about dedicating a small stream of benefits to conservation. But I think essentially what you are talking about is a negotiation where the creditor, the bilateral government that is the creditor, says we will reduce the debt if the debtor does take certain steps—conditionality, in effect.

Senator BRADLEY. Well, let me ask you this. Concern in a lot of developing countries is, of course, the inflationary impact.

Mr. CHAMBERLIN. Yes.

Senator BRADLEY. How do you manage that?

Mr. CHAMBERLIN. Well, I think I have two responses to that. The first is although the amount of debt we are talking about is a very large amount, in terms of debt-for-nature, the amount of debt that would ever be exchanged in a debt-for-nature transaction is probably a very small fraction of the overall amount, so that the magnitude of the macroeconomic effect is likely to be fairly small.

But more importantly, I think the LDC's have worked with the commercial banks, for example, in their governing agreements, to develop a mechanism that minimizes the surge of local currency into the local economy by providing for these swaps to be an exchange of hard currency debt for local currency debt which pays out over time.

And hopefully, the timing of those local currency pay-outs coincides with the needs of whatever the conservation or developmental project is that is being financed so you have a timed release of the currency into the local economy.

Senator BRADLEY. And the swap is made between the market price of the debt and that market price equivalent in bonds?

Mr. CHAMBERLIN. Normally what is done—we are talking about the private transactions, not the bilateral transactions.

Senator BRADLEY. No, I am not.

Mr. CHAMBERLIN. There is a so-called "splitting of the discount." The debt is available in the secondary market at a low price, say 30 cents. And what the countries are doing these days is not converting the full face amount, or a hundred cents on the dollar, into a local currency instrument, but they are converting, let us say, 70 of the 100 cents.

So, from the standpoint of the conservation group, it is purchasing the debt for 30 and it is obtaining 70 cents in local currency. Similarly, from the standpoint of the country, it is relieving a 100 cent obligation in hard currency and paying 70 cents of its own currency.

Senator BRADLEY. And that is a negotiation between the country and the creditor.

Mr. CHAMBERLIN. That is typically a negotiation between the country and the conservation group.

Senator BRADLEY. Yes.

Mr. CHAMBERLIN. The creditor, presumably, is willing to sell its debt in the second market at the lower price.

Senator BRADLEY. Right.

Mr. GODWIN. I think the important point, Mr. Chairman, is that if we are serious about this, then we should approach it the same way we approach any other type of structural reform program. There are probably a hundred different ways we could design a transaction to mitigate against adverse inflationary consequences in the debtor countries, and other problems.

The point I have tried to make in my presentation is that we have a lot to work with. For example, the Global Environmental Facility of the World Bank provides resources that can be used to offset these types of adverse consequences, and to engineer other types of enhancements in a package that would be designed to achieve environmental policy reform in Brazil.

So, if you sit down to the table and take into account everything that is available—the resources of the IMF, the resources of the

World Bank, as well as the incentives we could provide through debt forgiveness, the role of the NGO's and commercial banks—then we could put together something that would probably be unique, but not a simple structure.

Senator BRADLEY. Do you agree, Mr. Chamberlin, with Mr. Godwin's suggestion that the most effective and clearest way to achieve environmental benefits out of the debt issue would be to include environmental aspects of conditionality for World Bank or IMF conditionality?

Mr. CHAMBERLIN. I think that is a very important part of it. From an historical standpoint——

Senator BRADLEY. So that the idea would be that, look, if you want us to provide debt reduction, or this benefit, or that benefit, you are going to have to do X, Y, and Z on inflation, exports, et cetera, and also on environment you are supposed to do X, Y, and Z?

Mr. CHAMBERLIN. Exactly. Exactly. Done through a consultative process.

Senator BRADLEY. Is the World Bank and the IMF capable of telling Brazil what specific environmental actions it should take? I mean, my impression is that these are not environmental scientists at the World Bank.

Mr. GODWIN. No, but they can hire environmental scientists. The point is, they can tell Brazil what GNP targets to reach and what types of investment reforms, and they get results.

Senator BRADLEY. So a reasonable objective would be to say that we are part of this package if you reduce your CO_2 emissions, since Brazil is third in the world in CO_2 emissions. That we are basically telling them you have got to stop burning your forests, because that is where the bulk of CO_2 emissions come in Brazil. So, you are saying put that right out there and make that a part of the conditionality process.

Mr. GODWIN. I think that is probably the most significant thing that could be done. And I would also like to emphasize, Mr. Chairman, that I believe the issue of the environment is the issue of the decade, and probably of the century. I believe that environmental conservation will be on the economic policy agenda, along with trade and Third World debt. And we already see evidence of this in the summit meetings, and it will be the agenda in future summit meetings. I am convinced that this will be a major topic for discussion. It is a global problem. The international community is slowly but surely beginning to appreciate not only the biological aspects, or ecological aspects of the problem, but the financial implications.

Senator BRADLEY. Coming out of this hearing, I have heard a couple of specific recommendations. One is, my goodness, do not let the IRS regulations stand on different treatment, not being able to take international donations against domestic.

Mr. GODWIN. Yes.

Senator BRADLEY. And second, environmental conditionality.

Mr. GODWIN. Yes.

Senator BRADLEY. Those are the two major ones that I take from here. Do you have any others that you want to reiterate?

Mr. GODWIN. The only other——

Senator BRADLEY. Like push the Enterprise for the Americas aggressively because it makes sense and leverage the 20 percent and 30 percent as best you can.

Mr. GODWIN. And the other recommendation which my friends from the Nature Conservancy, The World Wildlife Fund, the Smithsonian, and other conservation groups would appreciate, would be to increase public funding available to these groups for conservation efforts, including the purchase of debt through the secondary market.

Senator BRADLEY. Now, your company does what, one dollar to the Nature Conservancy for——

Mr. GODWIN. Yes. This is an experiment that we are currently undertaking in our Hong Kong office. It involves cash donation to the Conservancy each time——

Senator BRADLEY. Somebody stays at a Ramada Inn?

Mr. GODWIN. It is a joint effort between Ramada and ourselves.

Senator BRADLEY. So it is a form of environmental discount.

Mr. GODWIN. Yes. And we may decide to expand it to other regions and other business partners. We are testing the concept now, and the results will determine whether we do anything more with it in the future.

Senator BRADLEY. Mr. Chamberlin, do you have any other thoughts, since I know you probably strongly disagree with his last suggestion.

Mr. CHAMBERLIN. Yes. The only thing I would add is that I think these are good ideas. The process of translating this good idea into something more tangible is not going to happen by itself. It is going to require a catalyst. Just like debt reduction from the standpoint of the commercial banks require a catalyst. And that catalyst was the international financial institutions, and that effort was catalyzed, and I think coordinated by—a large part at least—by the U.S. Treasury. That might be a place to start here.

Senator BRADLEY. Yes. Well, I thank you both very much for your testimony. I think it was very helpful today, and you have given us a couple of things to chew over, and I hope that you will be available for further consultation by the subcommittee.

Mr. GODWIN. I certainly will.

Senator BRADLEY. Thank you very much.

Mr. CHAMBERLIN. Thank you, Mr. Chairman.

Senator BRADLEY. The subcommittee is adjourned.

[Whereupon, the hearing was concluded at 12:00 p.m.]

APPENDIX

Additional Material Submitted

Prepared Statement of Senator Bill Bradley

Americans have recently been shocked by the devastation of one of the planet's most valuable resources—the rain forests of South America. Few people, though, know why this has happened. It is not merely greed—a big part of the reason is debt.

The debt burdens facing developing countries are not sustainable. There is only one way for many of these countries to come up with the cash to pay these burdens—destroying their natural resources. It is a lot like a family selling its heirlooms and family jewels to pay off an unwise debt. In that case, we might be able to say, too bad—they shouldn't have taken on the debt in the first place. But in the case of the developing countries of Latin America, the family treasures they are ruining are our treasures too. They belong to our planet, and it is up to all of us to see that they are preserved for our children.

I first became interested in Third World debt nearly a decade ago. At the time, it was dismissed as an abstract issue that would show up only on a balance sheet of banks. But in the rainforest you realize that you can seel hear, smelll and touch the effects of the debt burden. It's the wide road carved through the middle of the rainforest. It's the sound of bulldozers echoing among the chirps and squeals of the immense variety of birds and mammals living from tree to tree. It's the smell of gasoline and burning wood overwhelming the natural cycle of rot and renewal.

The debt of developing countries has soared from barely $50 billion in 1970 to an estimated $1.2 trillion last year. In many countries, there is only one word for the level of growth required to meet this debt load—unsustainable. It is unsustainable for people. It is unsustainable for the planet. And it is unsustainable for our own economy. How long can we keep drawing off the potential for real growth in these countries to meet debt payments before the contraction of export markets begins to eat away at the competitiveness, health and security of the United States? I believe the debt burden in developing countries is already costing Americans billions of dollars in foregone exports, hundreds of thousands of jobs, and it is certainly running up a bill for future generations.

The object of this hearing is not to relieve debt *per se*. The object is sustainable growth. We will explore options and new ideas for debt conversions, financing and management that will reconcile debt with the absolute requirement of sustainable growth. The urgency of protecting the world's base of natural resources must figure into any discussion of debt management. The earth must have a place at the table. At the same time, I believe that the debt crisis may offer an opportunity for all of us to build a base of security for our planet and our future prosperity.

Our two panels consist of recognized experts on the environmental aspects of debt reduction initiatives. We are pleased they have agreed to contribute their experience and thinking on how we might turn the debt crisis into an opportunity for sustainable development.

I look forward to a productive hearing that I hope will be the beginning of a long effort to restore growth in the developing countries and protect our own economic and environmental security.

Attachments.

UNITED STATES SENATE,
Washington, DC, May 15, 1991.

Hon. DAVID C. MULFORD,
Under Secretary for International Affairs,
Department of the Treasury,
1500 Pennsylvania Avenue, N.W.,
Washington, DC.

Dear Mr. Mulford: As you are aware, on Friday, May 10, I chaired the Finance Subcommittee on Deficits, Debt Management and International Debt hearing on debt conversion steps to aid development and to protect natural resources.

Since you were unable to appear in person, the Subcommittee requests that you provide written testimony for inclusion in the hearing record. The Subcommittee also requests that your testimony outline the Administration's policies and programs to integrate debt restructuring efforts with environmental concerns and that it address specifically the following questions:

—Describe what steps the Administration is taking to determine the social and environmental aspects of proposed economic adjustment programs as part of debt restructuring packages negotiated under the Brady plan.
—Several witnesses at Friday's hearing expressed concern that the austerity policies usually called for in IMF/World Bank programs have adverse social and environmental impacts. Describe any efforts to ensure that such potential impacts are considered as part of the IMF/World Bank adjustment programs.
—Describe the requirements for debt conversions under the Enterprise for the Americas Initiative (EAI) which will contribute to environmental protection and sustainable resource management.
—How will the Administration determine the amount of debt reduction under EAI?
—If a country continues to pay the same amounts as before and also has to make additional local currency payments to the environmental funds, how does it benefit from debt relief?

Testimony must be received by the Finance Committee by May 31, and a copy of the press release explaining Committee procedure is attached for your information. Also, I ask that you send a copy of your statement to Alix Sundquist, of my staff, for my review. Should you desire further information or have any questions, please contact Alix on 224-3224.

Thank you for your cooperation in this matter.

Sincerely,

BILL BRADLEY.

Enclosure.

STATEMENT BY HON. DAVID C. MULFORD, UNDER SECRETARY FOR INTERNATIONAL AFFAIRS, DEPARTMENT OF THE TREASURY

It is a pleasure to provide you with a written statement on the critical interactions between debt restructuring and environmental conservation in developing countries. Environmental considerations play an increasing role in economic policy decisions, since sustainable growth depends upon appropriate use of scarce environmental resources.

The U.S. Government has moved to provide potentially significant resources for the environment in Latin America and the Caribbean. On June 27, 1990, President Bush announced the Enterprise for the Americas Initiative, which aims to support economic growth in Latin America and the Caribbean through increased trade, investment flows, and official debt reduction. The Initiative will be a major force for environmental action. Increased trade, investment, and growth will ease the pressure on scarce resources and permit more attention to pressing environmental problems. The Initiative also contains specific programs aimed at promoting environmental conservation in the region with the participation of non-governmental organizations.

DEBT REDUCTION UNDER THE ENTERPRISE FOR THE AMERICAS INITIATIVE

Under the Enterprise for the Americas Initiative (EAI), the United States will reduce substantially the bilateral official debt obligations of Latin American and Caribbean countries that have strong economic and investment reform programs. In last year's farm bill, the Administration gained authorization to reduce PL-480 debt for qualifying countries. Under the legislation, countries qualify for debt reduction if they: (1) have in effect, or in exceptional circumstances are making significant progress toward, International Monetary Fund reform programs and, as appropriate, World Bank adjustment loans; (2) have in place major investment reforms in conjunction with an investment sector loan from the Inter-American Development Bank (IDB) or are making significant progress toward open investment regimes; and (3) where commercial bank debt is a large share of outstanding debt, have negotiated agreements to reduce debt and debt service, as appropriate. The Administration is currently seeking authorization to reduce AID debt based on the same criteria.

Many countries currently can make only minimal or no principal payments and are also forced to reschedule through the Paris Club a significant portion of interest payments. The rescheduled interest is capitalized—added to the stock of debt—thereby increasing debt service obligations. Over time, reschedulings can significantly increase the stock of debt, aggravating the disincentives to trade and investment.

Debt reduction under the Initiative will change this dramatically. The stock of concessional PL-480 and AID debt will be substantially reduced at the outset. New dollar payments will be at or below the level of payments currently expected from these countries based on their past payment levels and economic circumstances. The extent of debt reduction will be determined on a case-by-case basis through the National Advisory Council (MAC). Moreover, new dollar payments on this reduced debt will go directly to retire principal. As a result, a country's concessional debt to the United States could be eliminated within a period ranging from 5 to 20 years. This mechanism will significantly benefit debtor countries by making debt burdens more manageable, eliminating the debt overhang, and improving investor confidence. As a creditor, the U.S. government would be assured of repayment of a realistic sum.

This approach is a significant improvement over the rescheduling process in other ways as well. The relief from scheduled payments through EAI debt reduction is permanent, while the Paris Club ordinarily provides cash relief only on an annual basis. Reschedulings cannot be relied upon as routine methods of relief far into the future. The certainty of sharply reduced payment obligations under the EAI can provide a major benefit for debtor countries weary of continual renegotiations, permitting them to focus on the priority needs of domestic growth and development.

ENVIRONMENTAL ASPECTS OF EAI

The debt reduction aspect of the Initiative includes specific provisions to support environmental activities in the Americas. Interest on the new, reduced debt will be paid in local currency if a qualifying country has entered into an Environmental Framework Agreement establishing an Enterprise for the Americas Environmental Fund into which these interest payments would be deposited. This encourages a commitment to allocate domestic resources to the environment in exchange for significant debt reduction. The Environmental Funds will be administered by local committees—composed of one or more host country and U.S. government representatives, and representatives of local non-governmental organizations, who will be in the majority. A public/private Environment for the Americas Board is being established in Washington to review the implementation of this element of the Initiative.

This process for funding environmental projects with local currency interest payments on reduced debt is designed to nurture grass roots support for the environment in Latin America and the Caribbean. With a limited amount of resources, we believe that this program can make a significant contribution by targeting small projects and building local community infrastructure for addressing environmental issues. Furthermore, by bringing the government and non-governmental organizations in individual countries to serve together on the local committees, we can promote a partnership that will help these countries devote greater attention to the protection and preservation of their invaluable environmental resources.

Although the local currency payment will be in addition to a country's expected hard currency payment, it would not be a major burden for participating countries in the context of a significant reduction of their debt stock. Furthermore, we are prepared to consider alternative payment structures, as appropriate, to meet individual countries' financing capabilities.

In addition, the Administration has taken the lead in promoting debt-for-nature swaps with official debt. Debt-for-nature swaps are an effective way to transform limited hard currency resources into substantial environmental/conservation commitments by debtor governments. In a traditional debt-for-nature swap, an environmental organization purchases a country's debt paper at a discount and relinquishes it to the country's Central Bank in exchange for an environmental commitment. Such commitments can include the creation of a nature preserve or natural park, specific policy actions, or provisions of local currency—often in the form of bonds—to local non-profit groups to carry out environmental projects.

In order to facilitate debt-for-nature, debt-for-development, or debt-for-equity swaps in qualifying countries, the Administration is seeking authority to sell or cancel a portion of Export-Import Bank loans and Commodity Credit Corporation (CCC) assets acquired through CCC's export credit guarantee programs. Qualification for sale of Eximbank and CCC debt would depend on a country's progress in implementing the market-oriented reforms needed for debt reduction under the EAI. In addition, countries would need to have a national debt swap program in place.

The MAC would determine whether the necessary reforms were in place and the portion of eligible debt, which would normally be up to 20 percent of a country's outstanding obligations. To ensure that the official debt swaps do not compete with commercial swaps, the United States would inform the debtor nation of the amount of potentially eligible debt and secure a commitment that the country would expand its existing swap program.

The debt reduction provisions of the Enterprise for the Americas Initiative were designed to help increase the incentives for countries to undergo the reforms necessary to attract the investment they need to grow. By encouraging a commitment of local currency to support the environment and promoting official debt swaps, we can help ensure that the growth they achieve will be sustainable.

ENVIRONMENTAL AND SOCIAL IMPACT OF IMF AND WORLD BANK PROGRAMS

The Administration recognizes that it is crucial to incorporate, as appropriate, environmental and poverty concerns into reform programs supported by the IMF and the World Bank. Increased attention to environmental and social issues in lending by the international financial institutions will reinforce our efforts to promote environmentally sound and broad-based development. We are committed to working with the Fund and Bank to address adverse environmental and social effects of necessary economic reforms.

Treasury has been working hard to ensure that IMF and World Bank adjustment programs incorporate environmental and social concerns. In speeches at the annual meetings of the World Bank and the IMF last September, President Bush and Secretary Brady emphasized the importance of environmental issues. U.S. representatives at the spring and fall meetings of the Development Committee of the World Bank also stressed these points, including the need for environmental impact assessments. We have also strongly supported IMF and World Bank steps to address the social impact of adjustment lending.

IMF policy advice and financial support offer countries a more orderly path toward the economic reforms needed to achieve sustained growth and the alleviation of poverty. There are, however, inevitable short-term costs associated with macroeconomic structural reforms. The Fund has devoted much attention and considerable resources to protecting the poorest and most vulnerable segments of populations from these costs. These efforts are showing positive results. Virtually every Fund program includes support for social safety-nets such as targeted subsidies and unemployment compensation. For the poorest countries, IMF Policy Framework Papers (PFPs) include an assessment of the adjustment program's effects on the poor and steps to reduce potential negative side-effects. The U.S. Executive Director at the Fund continues to promote increased attention to poverty issues in IMF programs.

IMF adjustment measures at times can have indirect effects on environmental concerns. At the urging of the United States, the Fund has established a group of economists to serve as a liaison with other organizations on environmental research and advise the Fund on addressing environmental concerns. With World Bank assistance, the Fund has begun incorporating measures consistent with environmental protection into PFPs and some stand-by and extended arrangements. IMF Article IV consultations have included discussions of environmental issues. These steps are a significant move in the right direction, and the Administration will continue to advocate expanded consideration of IMF programs' environmental impact, consistent with the Fund's mandate.

The World Bank is also making strong progress on social and environmental issues. In designing structural adjustment programs, the Bank has pinpointed labor intensive growth policies as the way to assure equitable economic development. Job creation is an essential ingredient in achieving broad-based growth in developing countries. The Bank recognizes that structural adjustment can adversely affect the poor in the short-term through tighter government budgets and economic austerity. To forestall this result, the Bank emphasizes the improvement and expansion of basic social services to the poor, such as women's health care and potable water and sanitation projects. In addition, to ease the effects of poverty, the Bank engages in specifically targeted measures, such as direct transfers for food security for households headed by elderly or handicapped people.

The Bank has increasingly integrated environmental protection into its structural adjustment lending. Environmental objectives are often built into adjustment lending; four structural adjustment loans in FY 1989 explicitly addressed environmental issues, and there were nine such loans in FY 1990. These programs encourage reforms to improve the management of individual countries' natural resources. Even where there is no explicit environmental component, structural adjustment lending often has positive effects on the environment. For instance, reduced government subsidies for pesticides will improve water quality. Furthermore, the Bank has recognized the need to anticipate potential adverse environmental consequences in designing adjustment programs, and to avoid undesirable consequences through compensatory mechanisms when appropriate.

We believe that the World Bank and the IMF have been making significant progress on environmental and social impact assessment over the past year. We will continue to push hard in these institutions for rapid progress on specific issues.

ENVIRONMENTAL LINKAGES AND THE BRADY PLAN

Some NGO's have proposed broader linkages between environmental concerns and the international debt strategy in order to require both debtor governments and commercial banks to facilitate debt-for-nature swaps. In our judgment, there are two major constraints on incorporating environmental concerns into commercial bank debt and debt service reduction under the Brady Plan. First, an environmental linkage must not impede the negotiation of commercial bank debt/debt service reduction, which is vital to debtor countries' efforts to reform their economies and achieve sustainable growth. Adding independent environmental criteria to the determination of countries' eligibility for debt/debt service reduction could block progress in negotiating such accords. Debtor countries already must secure an IMF/World Bank program, implement necessary economic reforms while negotiating with commercial banks, and finalize financing packages by coordinating various forms of official support. Requirements outside IMF/World Bank programs would complicate the process further, reducing the incentive for countries to undertake essential economic policy reforms.

Second, it must be recognized that the United States has a limited ability to influence negotiations carried out directly between debtor countries and commercial banks. The U.S. Government is not in a position to advocate particular options or to impose unilaterally additional conditions on the negotiations.

With these constraints in mind, Treasury has encouraged both debtor nations and commercial banks to consider debt-for-nature swaps as an item on the menu of options negotiated by debtor countries and their commercial banks. While such an option might not be appropriate for all countries, it could provide a means of attracting participation by banks willing to contribute a portion of their portfolio for environmental purposes. Nonetheless, commercial banks may consider such donations financially less advantageous than other options under consideration.

CONCLUSION

The environment has been an extremely important element in the United States' approach to economic issues in recent years. International debt policy offers a promising opportunity for the United States to promote far-reaching environmental protection and preservation in debtor countries.

The Administration has worked actively toward this end by putting forth a creative and feasible program to convert official debt into funding for environmental programs in Latin America and the Caribbean. We look forward to working with Congress to implement this program and lay the foundation for sustainable economic growth in our hemisphere.

PREPARED STATEMENT OF MICHAEL CHAMBERLIN

Mr. Chairman and Members of the Committee, I am very pleased to testify before you today on the subject of debt-for-nature swaps. I will briefly describe the concept of debt-for-nature swaps from a legal standpoint, explain why they have not been more prevalent and then suggest how debt-for-nature can be encouraged in the context of the Brady Initiative to reduce the external debt owed by lesser developed countries ("LDC's") to commercial banks.

By way of introduction, I am a partner in the New York law firm of Shearman & Sterling and led our representation of the Bank Advisory Committee in connection with Mexico's 1989-92 Financing Package under the Brady Initiative. Since 1987, I have advised World Wildlife Fund and also the Smithsonian Institution, on a *pro bono* basis, in connection with the financing of various conservation projects. My views today are solely my own and do not necessarily reflect those of my law firm or of my banking or conservation clients.

(A) THE DEBT-FOR-NATURE CONCEPT

I believe that the concept of debt-for-nature is a brilliant one, and I applaud the handful of them that have been completed. But I am frustrated by the failure of debt-for-nature to catch on and realize its full potential.

From a legal standpoint, debt-for-nature swaps are relatively simple in concept but often difficult in practice.

Soon after the secondary market in LDC debt began to develop in the mid-1980's, commercial investors recognized that an LDC's debt could be bought from some commercial banks at a discount from its face value, and then resold to the debtor LDC at a profit, provided that the proceeds of the swap were kept in local currency and invested in the LDC. These purely voluntary transactions would enable banks to reduce their exposure to the LDC, would permit LDC's simultaneously to reduce their overall levels of debt and to encourage commercial investment and would allow commercial investors to purchase their investment funds more cheaply than through the normal foreign exchange markets. At about the same time, Tom Lovejoy, then of World Wildlife Fund and now at the Smithsonian, first suggested the opportunity to direct a portion of the savings obtained from debt reduction to the promotion of conservation in the LDC's.[1]

Implementing these transactions (called debt/equity and debt-for-nature swaps) initially proved somewhat difficult from a legal standpoint for two basic reasons:

> *First*, the syndicated debt agreements that governed most of the debt contained sharing and other clauses that effectively prevented individual banks from participating in transactions that did not provide direct and equal benefits to all bank creditors in the syndicate. These clauses existed for good and historical reasons, and it took several years to develop and bring effective new clauses that permitted debt/equity and debt-for-nature swaps (as well as the debt-for-debt exchanges that were later used to implement the debt reduction packages under the Brady Initiative). The debt agreements now in place for most debtor countries do permit these debt exchanges, so long as certain guidelines and procedures are followed.
>
> *Second*, debt/equity and debt-for-nature swaps in all cases require the approval of the host country's government and compliance with existing laws and regulations regarding foreign investment generally. How to satisfy these local requirements was not always straightforward, and the linkage of the issues of debt and foreign investment often seemed to complicate and delay the process of obtaining local approvals and satisfying local requirements.

As a general matter, these legal problems (both the contractual and the local issues) proved resolvable, so long as all parties shared a strong commitment to complete their specific transaction.[2]

(B) WHY ARE DEBT-FOR-NATURE SWAPS NOT MORE PREVALENT?

I think there are several obvious reasons.

(1) As a general rule, the LDC's don't like them very much. Doing these deals is worse than pulling teeth. have often wondered whether my time on small debt-for-nature deals would have been better spent trying to figure out ways to influence the lending and investment policies of the multilateral development banks. But I will come back to that in a few moments.

LDC's often seem to dislike debt exchanges generally (including both debt/equity swaps as well as debt-for-nature exchanges), partly because they inject local currency into the domestic economy outside of the normal budgetary process (and arguably

[1] Lovejoy, "Aid Debtor Nations' Ecology," The New York Times, October 4, 1984, at A-31.

[2] See generally Chamberlin, Gruson and Weltchek, "Sovereign Debt Exchanges," University of Illinois Law Review (1988), pp. 419-50.

in a marginally inflationary way) and partly because they are prone to internal criticism as being used primarily for the benefit of foreigners or the privileged classes. In my view, this criticism is unjustified, but nevertheless, as a result, debt/equity and debt-for-nature windows seem to open and close unpredictably. There are few actual swaps because no local constituency can effectively demand them. Although some LDC's are notable exceptions (such as Costa Rica, Ecuador and the Philippines), in most countries this has left debt-for-nature as somewhat of a poor orphan. Specific deals occur only as a result of a combination of connections, hard work and blind luck.

(2) In the few deals that have been completed, the economic advantages of the debt exchange mechanism have generally justified the purchase of debt, but the greater potential of debt-for-nature clearly lies in converting it from a mere foreign exchange mechanism into a source of additional funds. *Banks are reluctant to donate their debt* for a variety of reasons, but there are two major ones:

(a) large banks that intend to remain a creditor of the LDC generally prefer to hold onto their loans, partly because they believe that loan donations will prejudice their ability to negotiate with the LDC for maximum repayment; and

(b) banks that *are* willing to dispose of their debt are economically better off selling their debt than giving it away, in part because the current tax treatment of a donation does not provide sufficient advantages to outweigh the opportunity costs.

In short, banks do not generally consider donating debt to be in their best business interests.

As an aside, although there have been helpful proposals to change the tax laws to create greater incentives for American banks to donate debt, I personally doubt if changes in tax policy would alone result in significantly greater levels of donations. Donating debt is simply contrary to a banker's instincts or the business of commercial banking. Portfolio considerations are strong, and they generally outweigh other factors such as public relations. It is very difficult to persuade a debt portfolio manager who spends most of his day defending the value of his portfolio against calls for debt write-offs or renegotiation that he should give a portion of it away.

I suspect that widespread debt donations will not materialize, and that occasional, small donations by individual banks will continue to occur from time to time, but only in rare instances where they are justified by business considerations.

It is perhaps better to ask banks to donate a commodity that is equally valuable but far easier for them to part with—a portion of their time, talent and resources necessary to financially engineer transactions that use the leverage of purchased debt.

(3) Finally, what is the likelihood that debt-for-nature swaps, absent an unforeseen breakthrough, will somehow become more prevalent in the future? Although the circumstances of each LDC are different, generally speaking, as the LDC economies improve and their debt appreciates in value, *the economic advantages of debt-for-nature are slowly deteriorating.* The window of opportunity for debt-for-nature is slowly closing in a number of countries. Chile and Mexico are good examples. But this is not a bad thing. We should all hope, for the sake of their economies, peoples and environments, that other LDC's will soon be following the Chilean and Mexican examples.

(C) WHERE DOES THIS LEAVE DEBT-FOR-NATURE?

There is no doubt that the use of creditor government resources in the form of increased foreign aid or other fundings and reductions in bilateral or development bank debt levels can greatly contribute to conservation in the LDC's. As such, the Enterprise for the Americas Initiative is a great step forward, *and it provides a striking example of a new U.S. government policy that expressly recognizes the critical linkage between economic and environmental measures.* Economic policymakers in the current Administration now recognize that economic progress in the LDC's will be sustainable only in the context of sound environmental practices and that environmental considerations must be integrated more effectively into the on-going operations of the international financial institutions.[3]

---

[3] *See* Statement of the Honorable David C. Mulford, Under Secretary of the Treasury for International Affairs, before the Subcommittee on International Economic Policy, Trade, Oceans and the Environment, Committee on Foreign Relations, United States Senate, April 23, 1991.

In this spirit, it is clear that new ways could be found to encourage LDC's to adopt and implement debt-for-nature or other conservation programs and while at the same time encouraging commercial banks to supply debt to support them. This *must* occur in a manner consistent with LDC economic and political policies, the business interests of the commercial banks and the debt and economic strategies of creditor governments.

Perhaps there is still an opportunity, albeit only a small one, for debt-for-nature to be integrated into one or more of the remaining country debt financing packages under the Brady Initiative. But how would this work?

Neither debt reduction nor debt-for-nature swaps seem to occur spontaneously. Each requires a catalyst. In the case of debt reduction, one such catalyst has been the funding provided by the international financial institutions expressly for that purpose. Just as they have tried to incorporate greater environmental awareness into their lending policies, it is entirely appropriate that their efforts to encourage the commercial banks to reduce their debt should also include measures designed to ensure that economic growth in the LDC's is consistent with the wise use of their natural resources. If the World Bank or the Inter-American Development Bank, for example, provides pools or set-asides of funds for the debt or debt service reduction program of an LDC, it should be in a position to help develop some guidelines for the use by the LDC of a portion of such funds (or, alternatively, a portion of the savings of net external transfers generated by the resulting reduction) in connection with sustainable growth and conservation programs.

There are perhaps many ways that this could work, and it is *essential* that LDC's be given flexibility in how they incorporate environmental considerations into their economic programs and financing packages. I can suggest several examples (and I am sure there are others):

(1) an amount corresponding to a portion of the savings in net external transfers resulting from debt or debt service reduction could be dedicated to supporting either the budget of the LDC's environmental agencies or the LDC's leading non-governmental conservation groups;

(2) the LDC could implement a debt-for-nature swap program as part of a broader debt/equity program, perhaps on a more favorable basis than generally made available to commercial investors;

(3) a portion of the debt and/or debt service reductions conceded by the commercial banks could be represented by a credit denominated in local currency and dedicated for use in connection with debt/equity and debt-for-nature swaps. Redenominating a small portion of principal or interest from hard currencies into a conservation credit denominated in local currency help to bridge the gap between the negotiating positions of the LDC and its creditor banks;

(4) a portion of the proceeds of the development bank's lending as part of the LDC's economic program could be dedicated to the support of conservation or sustainable development;

and so on.

In each case, the point is to create, in the context of a Brady-style financing package, a framework that encourages the LDC to dedicate greater resources to conservation. In some cases, those resources would be obtained by the LDC either from the proceeds of loans from the international financial institutions or from the savings in net external transfers that result from the financing package. In other cases, the resources for conservation would in effect come from a portion of the debt or debt service reduction agreed to by the commercial banks. In the latter case, banks would not be asked to *donate* their debt, but rather would in effect be receiving a benefit (in the form of a local currency credit that could be sold or perhaps donated) in exchange for a small portion of the debt reduction agreed to by them.

Designing a country debt financing plan is already a very complicated undertaking, and it is ambitious to suppose that environmental concerns could easily be integrated into the Brady Initiative. And it is clear that environmental concerns will not be integrated into the Brady Initiative absent some encouraging catalyst. *But with the striking example of the Enterprise for the Americas Initiative before us, perhaps it is now time to redefine the Brady Initiative to include an environmental component.* As difficult as this may prove in practice, it is certainly possible and perhaps easier than persuading commercial banks simply to give their debt away.

Prepared Statement of J. Eugene Gibson

Mr. Chairman, members of the Committee, I thank you for the opportunity to discuss debt conversions and their potential to assist sustainable development and the protection of natural resources. My name is Gene Gibson, I am a consulting attorney with the Natural Resources Defense Council. NRDC, a non-profit environmental advocacy organization, has maintained an International Program for more than fifteen years, focusing primarily on the relationship between international development and the environment. This testimony is also submitted on behalf of the National Wildlife Federation and the Sierra Club. We collectively represent over 6.4 million members and supporters. Our testimony today focuses primarily on the debt-for-nature component of the Administration's Enterprise for the Americas Initiative (EAI). We will, however, briefly comment on additional debt-for-nature initiatives, specifically: increasing U.S. Agency for International Development grant assistance for commercial debt purchases, multilateral development bank financing for debt buybacks for environmental purposes, and incorporation of environmental components into Brady Plan debt reduction agreements.

I. The Debt Crisis and Environmental Degradation

Many of the developing countries are struggling to repay loans incurred during the 1970's with the commercial banks and the developed countries. As a consequence of the enormous pressures to service these debts, many highly indebted countries (HICs) lack adequate funding for natural resource protection. Furthermore, many HICs will exploit their natural resources in an unsustainable manner in order to service their debts. As one example, in its recently released book, *Amazon Crude,* NRDC examined the ecological havoc caused by American and other oil companies in the rainforests of eastern Ecuador. The report concluded that substantial debt relief is essential to reduce the pressure on Ecuador to open new rainforests areas to oil development and to mitigate environmental degradation from existing oil fields.

Debt-for-nature swaps have helped focus attention on this link between the debt and the environment. Moreover, debt-for-nature swaps afford an effective mechanism for a few non-governmental organizations (NGO's) to finance conservation programs in the HICs. There are limits, however, to how much debt NGO's can afford to buy. The $ million converted so far, is insignificant compared to the magnitude of the developing countries' external indebtedness, over $1.3 trillion, and their environmental financing needs. Consequently, we need to consider how the debt-for-nature concept can be expanded.

II. The Enterprise for the Americas Initiative

The debt-for-nature component of the Enterprise for the Americas Initiative (EAI) offers an example of how this concept can be expanded. As you know, the EAI legislation passed by the 101st Congress, contained in the 1990 Farm Bill and codified at 7 USC Sec. 1738, authorizes the Administration to restructure the P.L. 480 "Food for Peace" debt for eligible Latin American and Caribbean countries. These debts will be reduced and the interest on the new obligations may be paid in local currency into an environmental fund. S. 553 and H.R. 964, now pending in Congress, expand the EAI to include Foreign Assistance Act debt and track the language of 7 USC Sec. 1738.

NRDC, the National Wildlife Federation and the Sierra Club support the principle of debt relief linked with initiatives that set debtor countries on broad based environmentally sustainable development paths. For these reasons, we support the Administration's proposal to link reduction of bilateral debt with the establishment of local currency environmental funds. Although, we welcome the attention focused on the Western Hemisphere, we believe that at some point similar debt reduction strategies should be offered to other regions. In this regard we are pleased that Poland's debt relief program has a debt-for-nature component. We would welcome the opportunity to work with Congress and the Administration in defining the details of this program, which we hope will involve significant NGO participation. We regret, however, that the debt relief for Egypt and the African countries failed to contain environmental provisions.

The EAI debt reduction legislation for P.L. 480 debt provides a useful model for restructuring the FAA debt. We believe, however, that some refinements are necessary. We also have serious concerns regarding the Administration's proposal to sell credits held by the U.S. Export-Import Bank and the Commodity Credit Corporation.

A. Economic Conditionality

We are very concerned that the Administration's proposed macro-economic conditionality requirements have the potential to undercut the environmental benefits of debt reduction. The record of many International Monetary Fund (IMF) and World Bank macro-economic reform programs raises serious questions as to their effects on the environment. These programs typically slash government budgets and encourage massive increases in exports of natural resources. Social programs, including public health and environmental protection, are often cut severely. Few developing countries have adequate mechanisms to check environmental problems associated with increased natural resource extraction and other export industries.

One of the requirements for debt reduction under S. 553 is that a country "have in effect or have received approval for, or, as appropriate in exceptional circumstance, be making significant progress toward" the establishment of macro-economic reform agreements with the IMF and World Bank. This language provides some flexibility in determining compliance. Moreover, the conference report accompanying the P.L. 480 debt reduction legislation provides critical guidance on how to invoke this flexibility. The report states:

> If a country has not yet met these requirements, the U.S. shall consider potential environmental and social impacts in determining whether to invoke this flexibility. These requirements are designed to give flexibility where evidence exists that a proposed World Bank or adjustment program has adverse social or environmental impacts.

We recommend that Congress adopt similar language to accompany the proposed EAI legislation and that the Administration exercise this flexibility. In addition, we strongly recommend that a mechanism to determine whether the macroeconomic reforms will have an adverse impact on the poor and the environment be provided for in the new legislation, so as to provide a trigger for waiving these requirements.

We recommend that Congress require the Administration to document the potential environmental and social impacts from proposed adjustment programs. The U.S. Government agencies with environmental and developmental expertise should be directed to consult with NGO's to develop methodologies to evaluate whether the macroeconomic reforms could reasonably be expected to have adverse social or environmental impacts. By performing this analysis the Administration would know of any adverse impacts and whether a country is making significant progress towards its macro-economic goals.

B. Investment Reforms

H.R. 964 and S. 553 require that a country have placed into effect an Inter-American Development Bank (IDB) investment loan or otherwise be implementing, or making significant progress towards an open investment regime. Confusion arises, however, as to how this requirement should be interpreted. The IDB has yet to implement its investment sector loan program, so details as to IDB investment reform requirements are unavailable. Moreover, Treasury officials have also failed to provide details as to how they will evaluate whether a country is "making significant progress towards an open investment regime." Critically needed debt reduction and environmental benefits may be unnecessarily delayed while investment reform criteria are formulated and then further delayed if the criteria are stringently enforced.

If the investment reform requirement is enforced, environmental concerns must be addressed. The IDB should apply its recently adopted procedures for environmental assessment to all investment sector operations. The IDB's newly established environmental division is already hard-pressed to implement an environmental assessment program for the Bank's existing loan programs. In light of the role the Administration envisions the IDB playing in the EAI, we recommend that the Administration move quickly to make technical assistance available to the IDB's environment division, as authorized in Section 512 of the International Development and Finance Act of 1989.

Foreign investment will contribute to environmentally sound development only where explicit provisions are made for environmental protection. We recommend that the U.S. Government agencies with environmental expertise be directed to help the eligible countries develop appropriate environmental standards and regulations to oversee the environmental impact of the foreign investment. We believe that good public policy dictates that environmental reform work in tandem with investment reform.

C. NGO Participation

We strongly believe that the major role NGO's will play represents one of the most significant elements of the EAI. By helping empower local NGO's there will be environmental benefits beyond the immediate programs being funded. We wholeheartedly endorse this innovative public/private approach to foreign assistance. To ensure that host country NGO's play the prominent role Congress intends, we recommend that the language in the Farm Bill pertaining to eligible grant recipients, which states that only in "exceptional" circumstances can the beneficiary government receive grants, be incorporated into S. 553. Since the local currency grants are expected to be small and funds are limited, the EAI mechanism is better suited to NGO orientated activities than government programs.

We particularly applaud the language in the pending bills and the Farm Bill which call for representatives or individuals from a broad range of environmental and local community development nongovernmental organizations of the host country to serve on an Administering Body established in an eligible country. We hope the U.S. Government leads by example when constituting the Environment for the Americas Board (the Board). U.S. NGO's offer a diversity of views and expertise, and the Board would benefit from this diversity. Every interested NGO will not be able to serve on the Board; nevertheless, we believe the different types of NGO's should be represented.

We are disappointed that the Administration has so far failed to establish the Board or commence negotiating the Environmental Framework Agreements, as authorized by the Farm Bill. Expectations in Latin America are high, and we hope the Administration moves rapidly to follow through on this important initiative. We recommend that this Committee express concern to the Administration regarding this inaction and request that the Administration submit a report on progress to date.

D. Debt Conversions

The Administration proposes to sell credits held by the Export-Import Bank (Ex-Im) and the Commodity Credit Corporation (CCC) for debt-for-equity, debt-for-nature, and debt-for-development swaps. Such conversions could be potentially valuable if they support locally controlled environmental initiatives. We were pleased to note that President Bush explicitly described these debt sales as means to "improve our hemisphere's environment." [1]

In order to realize this salutary goal, the Administration should ensure that all EAI debt conversions support environmentally beneficial activities. We recommend that Congress authorize the creation of a Debt Conversion Working Group (DCWG) to develop detailed environmental guidelines for the use of purchased Ex-Im and CCC debt. The DCWG should include, *inter alia* the Chairmen of Ex-Im and CCC, the Secretaries of State, Treasury, and Commerce, the Administrators of EPA and AID, and representatives of non-governmental environmental and development organizations. Potential buyers of Ex-Im and CCC debt would be required to submit proposals to the DCWG, describing the intended use of the debt. Sales would be made only to those potential buyers whose proposals satisfy the DCWG guidelines.

We also recommend that the Congress direct Ex-Im and CCC to give priority consideration in the sale of their debts to proposals that involve the participation or result in the institutional strengthening of host-country environmental and development NGO's.

E. Additional Funding Sources

The United States has taken bold action, and we recommend that the Administration vigorously encourage other creditor countries to adopt similar debt relief initiatives. Nevertheless, the United States should not wait for other countries to act before providing debt relief. If the United States leads, others will follow.

We recommend that the Administration and Congress expand the debt-for-nature component of the EAI to include commercial debt donations, in addition to restructured U.S. bilateral debt. H.R. 964, S. 553, and 7 USC Sec. 1738(l) direct that the President shall make every effort to ensure that programs established through (EAI) Environmental Funds are able to receive donations from private creditors of the eligible country. To accomplish this objective, the ambiguities surrounding the

---

[1] Remarks by President George Bush in transmittal to Congress of the Enterprise for the Americas Act of 1990, September 14, 1990; White House Fact Sheet, "Enterprise for the Americas—Iniciativa Para Las Americas, A New Partnership for Trade, Investment, and Growth, June 27, 1990.

accounting treatment of charitable donations of commercial bank debt must be resolved and *modest* tax incentives provided.

Such actions would comport with the objectives of the Brady Plan as enunciated by Treasury Undersecretary David Mulford, who has stated that, "creditor governments should—review their regulatory, accounting, and tax regimes with a view to removing impediments to debt reduction, where these exist." [2] Treasury reiterated this position in a report to Congress, which described Treasury's role in facilitating debt-for-nature swaps, "as help(ing) reduce tax and regulatory obstacles."

In this regard, we are especially disturbed by a proposed IRS rule which would increase the disincentive for commercial debt donations and deter contributions for any international charitable activity. The proposed rule would control how taxpayers allocate tax deductions for charitable contributions. Tax deductions for contributions used inside the U.S. would be allocated entirely to US source income, and deductions for contributions used outside the U.S. would be allocated entirely to any foreign source income. Since taxpayers prefer to allocate deductions against domestic source income, the proposed rule will have a discriminatory effect on international charitable activities.

III. USAID GRANT ASSISTANCE FOR DEBT PURCHASES

The U.S. Agency for International Development (USAID) has a debt-for-development initiative that encompasses debt-for-nature swaps. USAID will issue grants to NGO's for debt purchases in the secondary market to fund debt conversions. To date this initiative has been relatively modest and only a few small grants have been issued. We recommend that USAID expand its debt conversion initiative. USAID, however, will be providing significant funds for proposed swaps in Panama and the Philippines.

The proposed Philippines swap will fund an endowment for a foundation, which will disperse grants to local and national NGO's. This initiative has raised many programmatic issues and highlighted the necessity of involving a broad range of NGOs early on in the planning process. This experience is instructive for forming the Administering Bodies, which will be established by each eligible country under the EAI.

IV. THE MULTILATERAL DEVELOPMENT BANKS

The multilateral development banks (MDBs) could provide loans or grants to finance a borrower country's purchase of a portion of its commercial foreign debt for conversion to fund environmental programs and projects. We welcome the news that the IDB is considering such a pilot program. This program is designed to finance small scale environmental projects, an approach which the NGO community has long advocated. The IDB Board of Governors will soon consider this debt-for-environment modality. Section 512 of the International Development and Finance Act of 1989, directs the Secretary of the Treasury to direct the U.S. Executive Directors of the MDBs to "actively promote, coordinate and facilitate debt-for-nature exchanges." We expect the U.S. Executive Director to the IDB to encourage vigorously the adoption of this modality.

V. BRADY PLAN

The Brady Plan offers potential for meaningful debt reduction and environmental protection. The record to date, unfortunately, on debt reduction is mixed. However, in light of the U.S. Government's willingness to reduce the debt it holds for the Latin American countries, the U.S. Government now has increased leverage to apply pressure to commercial banks to agree to substantial debt reductions. For example, the U.S. Government could prohibit a commercial bank from taking a business loss tax deduction for its impaired loans, if the bank fails to make substantial debt reductions pursuant to a Brady Plan agreement.

We are disappointed that no attempt has been made to incorporate natural resource management initiatives into Brady Plan agreements, despite a Congressional mandate in Section 533(f) of the Foreign Operations Appropriations Act for Fiscal Year 1990 to do so. The Treasury Department argues that incorporating environmental issues into a Brady Plan agreement is not feasible—yet the EAI demonstrates that debt reduction strategies can address environmental issues and that NGO's can play a role. The options on a debt reduction menu could include a varie-

[2] Statement by David C. Mulford before the U.S. Senate Subcommittee on International Finance and Monetary Policy, 101st Cong. 1st Sess. March 16, 1989.

ty of environmental initiatives. For instance, a country could agree to undertake environmental reforms or programs in return for debt reduction. Another option is for a debt buyback to be structured with a debt-for-nature component, similar to that proposed by the IDB but on a much larger scale. Moreover, commercial banks could donate a portion of their debt to an EAI Environmental Fund as part of a debt restructuring.

The time has come for the governments and NGO's in the North and South to strike a global bargain to address the twin problems of debt and environmental degradation. The debt-for-nature concept, if expanded, could help achieve this bargain.

Prepared Statement of Lamond Godwin

Mr. Chairman and members of the Subcommittee, my name is Lamond Godwin. I am a Senior Director of American Express Bank Ltd., which is the wholly owned international banking subsidiary of American Express Company.

I thank you for inviting me to present testimony to this very important Senate Finance Subcommittee on Deficits, Debt Management and International Debt. Like you, I am convinced that the environment will rank high on the international economic policy agenda as a dominant issue of the decade, and probably the next century.

I come before you today as an international banker with a special interest in engineering innovative solutions to financial and environmental problems in the debt distressed lesser developed countries (LDC's); and I appreciate and applaud the leadership you and this Subcommittee are providing in seeking solutions to these problems.

As you may know, American Express Bank Ltd. helped to pioneer the use of debt-for-nature swaps as well as debt-for-development swaps in partnership with The Nature Conservancy (TNC) and other nongovernmental organizations (NGO's) in several African and Latin American countries. Within our company, I either initiated or coordinated each of these transactions, with strong support from our chairman Jim Robinson and the senior management of our company.

In most of the debt-for-nature swap transactions, we sold debt to TNC (at deep discounts from face value) and provided technical assistance in structuring and negotiating the terms of the conversions. In some swaps we used loans from our own portfolio. In others we sourced the debt through the secondary market. In a few instances, we donated debt paper to TNC or made cash contributions through our parent company's foundation to help TNC and its partners fund conservation projects. To date, we have assisted TNC and its partners to acquire and convert LDC debt with a face value of more than $11 million to protect 9.3 million acres in Costa Rica, Ecuador, Argentina, and Brazil. In most of these transactions, the debt acquired by TNC was converted to local currency bonds providing an interest income stream to fund conservation activities over a period of several years.

In addition, American Express and the Ramada Hotel Group in Hong Kong are testing a new "cause related marketing" approach to generate funding for conservation activities in Asia. In this experiment, American Express and Ramada donate one U. S. dollar to the Nature Conservancy each time an American Express Cardmember stays at a Ramada Hotel. These and other American Express Company initiatives on the environment are described in a new report we released a few weeks ago which I am happy to make available to the Subcommittee.

I should state for the record that my remarks today are my own and do not necessarily represent those of my Company or my conservation organization clients.

Mr. Chairman, as you requested, my testimony today will address the potential for expanding debt-for-nature swaps to assist sustainable development and the protection of natural resources in the lesser developed countries. Also, as you requested, my statement is brief and will focus on five interrelated points:

First, from a purely financial point of view, the use of debt conversions to assist in the development and conservation of natural resources in the debt-distressed LDC's is a viable strategy of demonstrated effectiveness that could and should be greatly expanded. When properly structured, these swaps can produce real financial benefits for all parties to the transactions. Commercial banks selling the debt can gain important tax benefits and reduce their exposure to default and currency devaluation risks. The debtor countries can reduce the strain on their scarce foreign exchange reserves and make internal investments with funds that otherwise would have been used to pay foreign creditors. Conservation organizations can leverage scarce hard currency donations. For example, by using the debt swap mechanism, TNC was able to leverage its scarce U.S. dollar funding by a factor of 3 to 1 in Costa

Rica and 10 to 1 in Ecuador. Moreover, by converting the debt to bonds with maturities staggered over a period of several years, inflationary impacts in the debtor countries are minimized.

The debt-for-nature swaps completed thus far are too small and too few in number to have much impact on either the debt or environmental problems of LDC's. But they do represent an important beginning, and offer a model for the funding of conservation efforts that could be an important element of comprehensive debt reduction initiatives.

Second, some of the major obstacles to the expansion of debt-for-nature-swaps are: (1) inadequate incentives for debtor countries to support debt conversions for this purpose, (2) the limited financial resources available to conservation organizations for the purchase of debt, and (3) inadequate tax and other incentives to encourage private creditor banks to donate LDC debt to NGO's for debt-for-nature swaps. Any serious effort to expand debt-for-nature swaps must address these problems.

Third, I am convinced that support for environmental conservation can and should be a key element in all U.S. government bilateral debt reduction strategies because debt relief and forgiveness are the most powerful incentives for environmental conservation our government can offer to debt distressed LDC's. Without powerful incentives such as these, support for debt-for-nature swaps and other conservation efforts by the LDC's will decrease. The environmental component of the Bush Administration's Enterprise for The Americas Initiative is a significant step in the right direction which offers excellent opportunities to use local currency denominated interest payments, and Exim Bank, commodity Credit Corporation (CCC), and USAID debt obligations to fund conservation efforts. This approach should also be incorporated into the Administration's bilateral debt forgiveness agreements with Poland, and African countries under the Authority of Section 572 of the Foreign Operations, Export Financing, and Related programs Appropriations Act of 1989.

Another way to provide strong incentives to debtor countries to support debt-for-nature swaps and other environmental conservation efforts, would be to include conservation reform conditions in the Structural Adjustment programs of the International Monetary Fund and the World Bank along with the traditional targets for inflation, real GNP growth, investment policy reform and balance of trade. A portion of the $1.5 billion Global Environmental Facility established by the World Bank last year could be used for this purpose.

Fourth, the quickest and most effective way to expand debt-for-nature swaps is through increased funding of the U.S. Agency for International Development's debt-for-development initiative that provides grants to Conservation organizations for the purchase of commercial bank debt in the secondary market. Greater access by NGO's to these resources, together with the funding available through the World Bank's Global Environmental Facility, the Administration's Enterprise for the Americas Initiative and the private resources of U.S. and international conservation organizations would permit a significant increase in the number and size of debt-for-nature-conversions during the next few years.

My fifth and last point concerns the role of private financial institutions. Commercial banks can assist in the expansion of these efforts in a number of ways. For example banks can provide valuable technical advice and assistance in structuring transactions and finding ways to navigate around obstacles that may exist in the debtor countries. The significance of this role should not be minimized. It is an integral and time consuming component of every-debt-for-nature swap.

Another indispensable role commercial banks can play involves the sourcing of debt through the secondary markets controlled by these institutions.

Banks can also assist in the expansion of debt-for-nature swaps by donating debt or cash that could be used to purchase debt for swaps. However, I am not at all optimistic about the prospects for significant increases in donations of LDC debt by commercial banks for environmental conservation projects. From the perspective of the banks, it makes no sense to donate debt for environmental conservation, or any other purpose, when more attractive debt disposal alternatives are available. Existing tax and accounting benefits of donating debt are clearly inferior to those that can be gained through secondary market sales, debt equity conversions, debt-for-products swaps, write-offs and other approaches. When banks have made donations of debt they have done so primarily on the basis of nonfinancial considerations. For example, in the case of my own bank, we first made the decision to support the work of the Nature Conservancy and then decided that donating debt made it possible for us to give a larger contribution than if we made a cash donation. Even still, a complex set of factors determined which debt we could donate. These factors included: the secondary market price of the debt and our expectations about increases or decreases in this price; how the debt was carried on the bank's books for accounting and tax purposes; the bank's long-term strategy with respect to particular LDC's and its LDC portfolio; the composition of the portfolio; the size of the donation; public relations concerns and the increasing interest of our parent company's senior management in environmental conservation.

There is a widespread belief that one sure way to increase bank donations of foreign debt would be through changes in the tax and accounting treatment of foreign debt donations by banks, to either narrow or eliminate the financial advantages of selling the debt, such as a tax credit, or some other type of credit enhancement.

Although such changes could help encourage some banks to donate a portion of their lowest value nonperforming foreign debt, there would still be resistance within the banking community to taking an aggressive leadership role in advocating these changes because of a sensitivity to the perception that banks might be seeking a bail-out.

Some environmental conservation advocates have called for the incorporation of debt-for-nature swaps into the commercial debt restructuring process. Conservation initiatives have been discussed in this context, in Mexico and Costa Rica, but have not yet made it to the final round of negotiations in either these or any other Brady Plan debt restructuring agreements. Many debtor nation officials, as well as bankers, still consider environmental concerns a peripheral rather than a central issue that could complicate an already complicated process. But a breakthrough in this area might be achieved if it is negotiated, and not imposed.

In conclusion, I believe that debt-for-nature swaps can be structured to add value to both debt reduction and environmental conservation efforts in LDC's and should be expanded. The most effective way to eliminate the major obstacles to expanded use of debt-for-nature swaps in LDC's is through the incorporation of environmental conservation conditionality into multilateral structural adjustment programs and bilateral debt relief and forgiveness initiatives that can provide strong conservation reform incentives to debtor nations; and through increased public and private funding for purchases of debt from EXIM BANK, CCC, and commercial banks in secondary market transactions.

Thank you.

Prepared Statement of Thomas E. Lovejoy

I am Thomas E. Lovejoy, Assistant Secretary for External Affairs at the Smithsonian Institution and President of the Society for Conservation Biology. I would like to make some comments on the experience of debt-for-nature to date, in particular, the possible application to Brazil.

First, the need. There is widespread acknowledgement that the scale and rate of environmental destruction worldwide is without precedent in our history. The waste gasses of human society through the burning of fossil fuels and tropical forests coupled with the heat trapping capacity of chlorofluorocarbons are changing the very physics and chemistry of our planet. Tropical deforestation is a very significant portion of that problem, as well as the dominant part of the loss of biological diversity. The essential point is that tropical nations play a critical role in greenhouse, tropical deforestation and extinction problems.

These countries have sharply limited financial and manpower potential to address these challenges. Debt is not only an important root cause of these problems; it also, through debt conversion, can be an important part of the solution. The amount converted since debt-for-nature was first proposed in 1984 is disappointing. It has been largely limited by the financial resources available to private conservation organizations to buy commercial bank debt, and by tax consequences for banks interested in donating debt. While debt-for-nature is neither a solution to the debt or environmental problems by itself, it can play an important role, especially with environment.

The sovereignty issue. Debt-for-nature has often been misinterpreted as an invasion of sovereignty, as if the United States was rushing in and forcing a nation to fork over important land and resources in something akin to an environmental Louisiana Purchase. This is patently without basis, especially when such concerns are rarely raised about the far more frequent debt-for-equity swaps.

The inflation issue. Central banks and economic planners frequently wave the spectre of inflation generated by additional currency added to a national economy without any real addition to productivity. This assumes that environmental activity is uneconomic, which is simply untrue, but even if it were so, the debt relief involved is anti-inflationary. When Brazil buys dollars on local markets to pay its debt interest, it is not generating any financial productivity. It should be noted that inflation has not been a problem for Chile, which has carried out the most debt-for-equity swaps (literally in billions of dollars). Nor has inflation been seen as a problem for Costa Rica, which has converted 5% of its international debt for environmental purposes. Further, when debt is converted to interest-bearing instruments, the amount of currency is limited, and stability is provided via an endowment.

The issue of indigenous peoples. Debt-for-nature has sometimes been portrayed as a mechanism for elite flint-hearted environmentalists to take lands away from indigenous peoples. Debt conversion is, in fact, a mechanism which is available to such peoples for their own uses. COICA, the Coordinating Body of the Indigenous Organizations of the Amazon Basin, has recently proposed a mechanism for a debt swap. Furthermore, the environmental community has learned, in general, of the need to take local people, whether Indians or campesinos, into account. In the end, no conservation project will succeed unless' it is integrated into the local social, as well as biological,' landscape.

The accountability issue. The question is sometimes raised how can one achieve anything lasting with debt- for-nature? There is actually considerable experience in organizations like Conservation International, the World Wildlife Fund, The Nature Conservancy, etc. in executing social projects. The key is always in the project design and in the choice of partners. The local partners in all possible instances should include private organizations. As always, the benefits to be gained from a public,' private partnership are key. This should be an integral aspect of the Enterprise for the Americas Initiative, both in the countries in question, and on the United States board.

The nature of debt-for-nature. As always, when there are possible resources, many interests would like to gather under the tent. While I do believe it is important to think beyond protection of natural areas in the strict traditional national park or reserve sense. I believe it is important not to leave the door ajar. It would be useful to support pilot projects in sustainable extractive use to bring them to the point of commercial take-off. Traditional development should be left to traditional development sources. Urban air pollution could soak up most debt-for-nature contemplated by the Enterprise for the Americas Initiative—the amounts involved in the Enterprise are, after all, not that great—and should be left primarily to industrial sources and more traditional sources of finance. The desperate long-term needs for global forest management (and slowing of climate change) and biological diversity should receive the bulk of attention.

Brazil. With the greatest debt burden and greatest environmental problems, Brazil has often seemed to many a logical, indeed urgent, prospect for debt-for-nature. The Sarney administration was unwilling to consider it, but asked for contributions to help with- its Amazon and other environmental problems. The Collor administration has been considerably more forthcoming on environmental problems, but has yet to speak publicly in favor of debt-for-nature. Yet the private conservation groups in Brazil are interested, and in fact prepared a $25,000,000 proposed package for debt-for-nature in 1990. And the key institutions could be measurably strengthened and stabilized by endowments funded through debt conversion. I believe a carefully constructed debt-for-nature package for Brazil could become a harmonious overture to the 1992 United Nations Conference on Environment and Development in Rio de Janeiro.

The example of Brazil brings out a fundamental point. Brazil seems unwilling to consider debt-for-nature until it has some debt relief. Without commenting on whether debt relief for Brazil is appropriate or not, it seems one risks the loss of an important opportunity to address environmental problems unless debt-for-nature is considered along with debt restructuring and debt forgiveness. While it will require considerable diplomacy, it makes sense to have debt- for-nature as an integrated part of any nation's debt restructuring. It is all too easy to forgive massive amounts of debt as in the case of Egypt or Poland, and then be confronted later by environmental problems without the resources that had been available through the debt conversion mechanism.

Thank you.

Attachments.

DEBT-FOR-NATURE SWAPS: U.S. POLICY ISSUES AND OPTIONS

KATY MORAN

In 1984, Thomas E. Lovejoy, then vice-president for science at the World Wildlife Fund and deeply concerned about the accelerating rate of both debt and deforestation, first proposed that indebted developing countries be allowed to exchange their debt for protection of natural resources, particularly tropical forests.[1] Less than seven years later, this visionary concept has become reality through more than $100 million in debt-for-nature swaps. As the U.S. initiates the use of official debt to expand this concept, policy makers need to examine more thoroughly the benefits and constraints of this action and to clearly define options available for implementation.

NATURE OF THE DEBT

During the inflationary economic environment of the '70s, the Third World borrowed heavily from three types of creditors—commercial banks, multilateral development banks (MDBs) and bilateral foreign assistance programs—that were eager to encourage economic development. However, oil price shocks in 1973 and 1979 and the U.S. recession starting in 1981 altered the economic conditions that affected debt payments. Because of rising interest rates, an appreciating dollar and declining commodity prices, developing countries soon found it difficult to pay the interest on their debts.[2]

In August of 1982, the Mexican government revealed that it could not service its $80 billion debt and by the end of 1983, 42 other countries also were behind on their payments. They resorted to borrowing from the International Monetary Fund (IMF), which grants short-term loans to financially troubled countries if they submit to specific economic reform programs.[3]

The IMF ordered fiscal austerity and export programs to reform economic conditions in the overborrowed countries that applied for funds to service their external debt. Austerity programs made imports more expensive to debtor countries by devaluating local currency and made basic goods more expensive by eliminating subsidies. Currency devaluations increased import prices and stimulated a general inflation rate. For example, after three devaluations over a 13 month period, Philippine families paid 80 percent more for the same basket of groceries in 1984 than in 1983. Reduced government subsidies created a shortage in fertilizers and other agricultural inputs for small farmers, causing food shortages and malnutrition among the rural poor. Wages of workers were frozen and government expenditures were reduced by eliminating social welfare programs, actions which resulted in lowered education and health services.[4]

Since loan payments must be paid in U.S. dollars or another hard currency, the IMF also required debtor countries to increase their production of export commodities and to develop non-traditional exports to trade for hard currency.[5]

Developing countries flooded export markets with coffee, cocoa, clothing, coconuts and copper. But world trade stagnated from 1980 through 1983, coinciding with IMF export programs, and prices were driven down. For example, world sugar prices remained at 5 or 6 cents a pound in early 1985, while production costs in the Philippines were at 12 to 14 cents a pound.

To promote exports, subsistence agriculture was substituted by monoculture for world markets. As a result, staple foodcrops were less available to the poor, causing an increase in malnutrition, and a diverse and relatively balanced food producing system was replaced with ecologically unstable monocrops.

IMF austerity and export programs created greater hardships for the poor

Katy Moran is program analyst for the Assistant Secretary for External Affairs, Smithsonian Institution. This article will appear as a chapter in a forthcoming book entitled "Development or Destruction? The Conversion of Forests to Pastures in Latin America," edited by Theodore E. Downing, et al. 1991, Westview Press.

and the environment in the already impoverished Third World and did nothing to increase its creditworthiness. The World Development Report of 1988[6] stated that resource transfers from industrial countries to developing countries shifted from a capital inflow of $147 billion between 1977 and 1982 to a capital outflow of $85 billion between 1982 and 1988. Today, more money is going out of developing countries for debt payments than is going into them for development.

IMPACT OF DEVELOPING-COUNTRY DEBT ON THE U.S. ECONOMY

Debt creates crises in many sectors, including trade, industry, banking and farming, for both creditor and borrower countries. Since about one-third of U.S. trade is with the developing world, massive job losses in U.S. export-oriented industries occurred, partly because of IMF import restriction in borrower countries. Wharton Economic Forecasting Associates testified before the Joint Economics Committee of the U.S. Congress in June of 1985 that, in one year, the U.S. lost 800,000 jobs as a result of the debt crisis in Latin America alone.

In creditor nations, commercial banks that hold large portfolios of Third World debt are at risk. U.S. taxpayers have learned from the savings and loan crisis that they pay the cost when overexposed banks fail.

U.S. farmers also are affected negatively by IMF export and import programs. While Third World imports of U.S. commodities are declining, increased Third World exports directly compete with corn, rice and soybeans produced by U.S. farmers. Markets are flooded and prices driven down, undermining the position of farmers everywhere. Farmers in the U.S. and in the Third World both suffer from the high and fluctuating interest rates generated by U.S. budget deficits and an unstable international economic system.[7]

WHO OWES WHAT TO WHOM

Seven countries account for almost half the $1.3 trillion Third World debt: Mexico; Brazil, Argentina and Venezuela in Latin America; and South Korea, Indonesia and the Philippines in Asia. Each owes more than $25 billion, mostly to commercial banks that hold short-term loans with high interest rates. The default of one of these "Big Seven" debtors would shake the international financial system; their collective default could destroy it.

...LINKS BETWEEN DEBT AND DEFORESTATION DEMONSTRATE THAT IT IS IMPOSSIBLE TO ISOLATE ECONOMIC, SOCIAL AND ENVIRONMENTAL PROBLEMS.

Middle-range debtors consist of two dozen African nations plus Costa Rica, El Salvador, Guatemala, Honduras and Nicaragua in Central America; and Bolivia, Peru, Ecuador and Chile in South America. These countries owe, to both commercial and official creditors, large debts in proportion to their capacity to repay, but their default would not trigger a worldwide financial crisis.

The very poorest African countries are the third group of debtors. They owe official creditors, both multilateral and bilateral, which grant low-interest-rate loans with long-term payment schedules. They do not have large debts because commercial banks regard them as poor credit risks, but they are seriously affected by the international financial system.[8]

Today, most of the capital of developing nations goes to pay the almost $1.3 trillion external debt owed to developed nations. There is not only no money left for growth in the Third World, but economic policies, including the required IMF export emphasis, are depleting the natural resource base upon which the future growth of the developing world ultimately depends.

SOCIAL AND ENVIRONMENTAL IMPACTS OF DEBT AND DEFORESTATION

All resources are affected by the debt of developing countries, but it is tropical forests, and the poorest of the poor who depend on these forests as their only resource, that suffer first and worst from deforestation. Not only do forest peoples lose their homelands, but humanity loses the indigenous knowledge of the use of these forest resources that its inhabitants have accumulated over millenia. One-half of the world's population uses fuelwood for cooking and heating, so it is the rural poor in developing countries who are the first to suffer from deforestation. "Traced through its effects on energy supply and water resources, tropical deforestation impoverishes about a billion people."[9]

Socioeconomic pressures associated with deforestation are difficult to address and they intensify relentlessly each day. Poverty, overpopulation, inequitable land distribution, poor land use and land tenure policy and inappropriate development lead to a vicious cycle of more poverty and more pressures on resources. National and international policies to generate hard currency for debt payments promote mining, logging, cash crop monocultures and expanded cattle production. They are the leading reasons why tropical forests the size of a football field are being degraded or destroyed every second of every day. The urgency of tropical deforestation is sounded by an alarming report of the Food and Agriculture Organization and the World Resources Institute which states that roughly 50 percent more tropical forest is being cleared today than as little as one decade ago.[10]

Deforestation also compromises future generations. Tropical forests are the habitat of almost half of the plant and animal species of the planet; deforestation erodes the biological diversity of life itself as it accelerates the extinction of more than 100 species daily. Forests moderate climate. As they are destroyed, they not only release carbon into the atmosphere, but the forest capacity to act as sinks to absorb carbon emissions diminishes. Loss of forest cover exacerbates soil erosion and flooding, increases siltation in rivers and estuaries, impairs watersheds and disrupts the hydrological cycle of large areas.

These links between debt and deforestation demonstrate that it is impossible to isolate economic, social and environmental problems. Solutions require recognition of their relationship to each other.[11] In the past, we feared the impact of economic growth on the environment, but today we must admit to the consequences of environmental stress -- deforestation, particularly -- on future economic prospects worldwide.

CURRENT STATUS OF DEBT-FOR-NATURE SWAPS

1. United States Commercial Bank Debt. Of the three types of debt, the "first generation" of debt-for-nature swaps (Sale With A Purpose) used commercial bank debt.[12] Because many commercial banks are collecting neither interest nor principal payments for Third World debt, a secondary market has developed in which banks can trade or sell their foreign debt at a discounted rate to minimize their losses. Commercial debt has been sold or donated to environmental non-governmental organizations (NGOs), and swaps have been small and country-specific, but they illustrate how the debt-for-nature swap concept has developed.

In the first debt swap during July of 1987, Conservation International (CI), a U.S.-based NGO, and the government of Bolivia announced a plan to manage almost four million acres of tropical forest in the Bolivian Amazon. Six-hundred and fifty thousand dollars worth of deeply discounted Bolivian debt was purchased for $100,000 on the secondary market by CI, which then cancelled the debt in return for a tropical forest protection and management plan. CI is the first to acknowledge that its pioneer debt-for-nature swap was not without problems, but the swap beat the path for other conservation NGOs that soon followed CI's lead.

One lesson learned that would have limited future swaps was the inflationary effect of a sudden increase in money supply in the host country's domestic economy. To balance this effect, swap arrangements now routinely convert most of the debt title into local currency bonds, using the interest for stable and long-term financing for conservation programs.

Local NGOs, such as Fundacion de Parques Nationales in Costa Rica, Fundacion Natura, in Ecuador and the Hanbon Foundation, in the Philippines, have facilitated nearly $100 million of U.S. debt retirement in their countries through swaps. Their U.S.-based counterparts, such as CI, World Wildlife Fund, The Nature Conservancy and others, have facilitated these swaps that finance a wide range of activities such as the training of local scientists and land managers, natural resource conservation and management of buffer zones around critical natural areas.

Each swap has been country-specific, but a generic swap procedure is as follows:

- The impetus for a swap originates with a local NGO that enlists the help of a U.S.-based NGO to raise funds to purchase a portion of its country's commercial bank debt.
- A U.S. commercial bank either sells (through the secondary market), or donates to a U.S.-based environmental NGO, a debt instrument that would sell at a deep discount on the secondary market.
- The U.S. NGO negotiates with the borrower country on the terms of settlement and on the environmental activity suggested by the local NGO.
- The borrower country typically agrees to pay some or all of the value of the loan in local-currency, long-term interest-bearing bonds to a local NGO working with its U.S. counterpart.

To date, debt swaps have been narrow in scope, creating a misconception of the purpose and potential of swaps. "Ecological imperialism" has been charged, with swaps being criticized as an exchange of debt for ownership of sovereign territory. In fact, of the first generation of swaps, ownership of land has never, nor ever was intended, to change hands. Likewise, the impetus has emerged from the debtor country, and funds are managed by local organizations and structured to meet local conservation priorities.[14]

October 19, 1987, is remembered as Black Monday on the New York Stock Exchange. Coupled with the international economic instability of the time, Black Monday caused many large commercial banks to increase their loan loss reserves for developing country debt. This additional expense created an incentive for banks to donate or sell that debt for swaps. To encourage this, environmental NGOs lobbied for a measure that was adopted in the Continuing Resolution (CR) that passed in the U.S. Congress on December 22, 1987. The CR legislation requested the U.S. Treasury Department to report on initiatives to promote the "purchase, at market discounts (such as the secondary market), developing country debt in ex-

BEST AVAILABLE COPY

change for domestic currency investments in conservation at the full par value of the purchased debt."

In response, the Treasury Department issued Revenue Ruling 87-124 that allows a commercial bank to take a deduction from taxable income to the full face value for a donation of debt to use in debt-for-nature swaps, even though the loan instrument would sell on the secondary market at a deep discount. Although Treasury views this as revenue neutral, to date, no commercial bank has attempted this transaction because of remaining tax and accounting uncertainties that have yet to be resolved.

2. Multilateral Development Bank (MDB) Debt Owed to Creditor Nations. Congressman John Porter (Ill.) took the first legislative action to alleviate the debt and deforestation problem. Porter's Tropical Forest Protection Act (H.R. 3010 and H.R. 1704 during the 100th and 101st congresses, respectively) called on the U.S. executive director to the World Bank and other multilateral development banks to allow a country with MDB loans to convert part of its debt payments into local currency to use for environmental activities. The bill also carried important provisions to strengthen NGOs worldwide that are involved in grass-roots environmental protection and resource management in developing countries.

The World Bank responded to Porter's bill by stating that any form of debt rescheduling or restructuring would undermine its AAA credit rating and that rescheduling is forbidden by its charter. However, under Article IV, Section 4 (c) of the Bretton Woods Conference, loan contracts can be made in accordance with the following contract provisions: "If a member suffers from an acute exchange stringency," it may apply to the bank for a relaxation of the conditions of payment and the bank may accept service payments on the loan "...in the member's currency for periods not to exceed three years." Also the bank may "...modify the terms of amortization or extend the life of the loan, or both."[15]

Many feel that debt-for-nature swaps offer an opportunity for the bank to demonstrate concrete mechanisms to improve and mitigate admitted negative environmental consequences of past bank funding. In 1988, bank president Barber Conable publicly stated a commitment to improve the environmental quality of its loans. "If the bank has been part of the (environmental) problem in the past, I intend to make it a leader in finding solutions," Conable stated.[16]

TODAY, MORE MONEY IS GOING OUT OF DEVELOPING COUNTRIES FOR DEBT PAYMENTS THAN IS GOING INTO THEM FOR DEVELOPMENT.

During the 101st Congress, Representative Porter's bill was rolled into H.R. 2494. The bill passed and was signed into law (PL 101-240) by President Bush on December 19, 1989, as The International Development and Finance Act of 1989. Current efforts to use multilateral bank debt for swaps are being promoted by international NGOs and by executive directors to MDBs in other creditor countries.

3. Bilateral Debt Owed to the United States. The possibility of a great increase in the scale of debt swaps occurred following a February 1990 summit with President Bush and the presidents of Colombia, Peru and Bolivia. The outcome was announced by Bush on June 27, 1990, as the Enterprise for the Americas Initiative (EAI). The purpose of the EAI is to forge an "economic partnership" within the Western Hemisphere through a plan that concerns trade, investment and debt. Under the EAI, if a Latin American or Caribbean country has demonstrated actions toward economic, trade and investment reform, the U.S. will reduce the country's official bilateral debt. These countries owe a total of nearly $12 billion to the U.S. in concessional debt which includes PL-480, or Food for Peace, and USAID loans, as well as market-rate debt that includes Export-Import Bank and Commodity Credit Corporation loans. Debt-equity swaps, which are also part of the EAI, will not be discussed in this article since most of the environmental community have historically claimed that these transactions are an entirely different concept from debt-for-nature swaps.

To be eligible for the EAI debt reduction, a debtor country must have plans to satisfy four conditions:

- Economic reforms through the World Bank
- Economic reforms through the International Monetary Fund
- Investment reforms through the Inter-American Development Bank
- Debt reduction programs with commercial bank lenders

If a debtor country has complied with these conditions, its principal will be reduced by an average of 50 percent and, in some countries, by as much as 85 percent. The reduction will be determined on a case-by-case basis and the remaining principal must be paid in dollars over 20 to 30 years.

It must be emphasized that the debtor country will receive a reduction in what it owes, but not in the amount it currently pays. Its historical principal payments must continue so that the U.S. government will continue to receive the payments that the budget was constructed to receive. In this way, the process remains neutral to the U.S. budget and requires no new appropriation.

The debtor then pays a concessional interest rate of 2.5 percent on its reduced debt in its local currency, which will be placed in a local environmental fund for the country to use for environmental activities. Local currency interest payments will gradually decrease as principal diminishes.

Financial incentives that would lead a debtor country to participate in the EAI are that its principal will be substantially reduced, that interest payments can be paid in local currency, rather than dollars, and that the debtor will not continue to accumulate principal and interest arrears which lead to an ever-mounting debt burden.

However, many Latin American and U.S. environmental NGOs criticize the EAI as having cross-purposes. They recognize that the EAI brings debt-for-nature swaps up many levels in terms of financing available for environmental activities. But they are concerned that the EAI conditions for economic reform make everything else secondary, including the environment. Legitimate doubts were raised after the World Bank completed an evaluation on the impact of its economic reform programs. The report failed to include the environment as an indicator in the evaluation and highlighted the need for a better understanding of the costs and benefits of its economic reform programs.[17]

More importantly, policies of the IMF, unlike those initiated by Conable for the World Bank, lack an institutional mandate to assess the environmental and social impacts of its actions. Many question whether unevaluated conditions for economic reform are consistent with the environmental objectives of the EAI and the process of sustainable development.

Nevertheless, intense lobbying by environmental NGOs eased some of the stringent conditions of the original administration bill and resulted in passage of a part of the EAI. At the close of the 101st Congress, the Farm Bill (S. 2830, S. Rpt. 101-357, H. Rt. 101-569, Conf. Rpt. 101-916) incorporated the PL-480 component of the EAI. It passed Congress and was signed into law by President Bush on November 28, 1990. The bill authorizes $1.7 billion of U.S. PL-480 debt in Latin American as eligible for debt reduction.

A DEBT TO NATURE

In 1988, Thomas Lovejoy, now assistant secretary for external affairs at the Smithsonian Institution, stated, "I am utterly convinced that most of the great environmental struggles will be either won or lost in the 1990s, and that by the next century, it will be too late."[18] To finance solutions to these urgent struggles, bilateral, multilateral and commercial bank debt now offers an enlarged scale of what can be called a "second generation" of debt-for-nature swaps.[19] This increase in scale more clearly defines some incentives and constraints associated with debt swaps and raises other questions that remain unanswered.

Incentives—U.S. NGOs lobbied for a significant provision in the EAI that mandates that local NGOs play a key role in implementing and managing programs funded by the Environmental Trust Funds. This incentive can dovetail macro and micro economic objectives of debt reduction at the national level and employment in grass roots environmental programs at the local level. It can decentralize funds, political power and personnel to those best placed to understand and manage local resource needs. Strengthening NGO institutions in developing countries can cause perhaps the most potent results in Latin American countries with fragile new democracies.

Since 80 percent of Latin American debt is owed to commercial banks, the EAI can be the catalyst to move those debt negotiations forward. To help fulfill the fourth condition of the EAI and mobilize funding for swaps, the U.S. government could clarify revenue rulings and tax laws which may encourage commercial banks to donate their debt to NGOs for use in swaps.

As bilateral debt begins to play a major role in financing debt-for-nature swaps, the World Bank is recognized as the institution to even further increase the scale of future swaps. Debt restructuring in developing countries is sound policy as debt swaps offer both the long-term financial and the natural resource management benefits necessary for sustainable development.

Constraints—Some believe swaps "legitimize" debt which was created unjustly to benefit only the dictators who negotiated the loans in the past and not the people who, today, struggle to rule democratically. They feel debt problems are so severe that debt forgiveness is the real issue and that swaps distract from it. Proponents argue that swaps never were intended to solve the debt crisis, but to free funds for much needed conservation programs.

The EAI is politically sensitive because debtor countries must liberalize trade and privatize investment to satisfy foreign interests, rather than domestic ones. Critics doubt that governments will take the political risk of imposing stringent macroeconomic and trade reforms without immediate cash flow relief in their country.

Because second generation swaps will expand dramatically the scale of debt reduction, remaining commercial bank debt will have a higher value for "free riders." These are banks that have not participated in debt reduction but will benefit because the [illegible] become more valuable [illegible] more likely to be paid. The [illegible] market for commercial [illegible] reflect this change and NGOs [illegible] the advantage of the [illegible] gives them leverage [illegible] tions.

BEST AVAILABLE COPY

Unanswered Questions—Unanswered questions that arose during congressional hearings on the EAI include the following: Are eligibility criteria too rigid and could the U.S. itself meet them? Could this disqualify or discourage countries that do merit help? By law, the president was given discretion to determine a country's eligibility. Does too much discretion vested in the president to waive conditions yield too much congressional control of the EAI process? How can eligibility conditions be harmonized with environmental protection? Does the EAI set unwanted precedents to forgive other debt? Have budget impacts been fully accounted for? Should the use of environmental funds be broadened to include development? Exactly what kind of environmental activities have first generation swaps accomplished and what has been their impact on local people?

CONCLUSIONS

As the scale of debt swaps increases, so does the scale of their consequences. Congress is likely to pursue further action on the EAI during the 102nd session, so a careful consideration of swap consequences is required through a balanced discussion of social needs, economic growth and the wise management of natural resources.

Two things are quite clear, however. Debt-for-nature swaps offer the critical time to secure environmental protection of the larger ecosystem for the present and future global community. Swaps also protect and promote the sustainable use of natural resources that is necessary for the economic development of the Third World.

It is unrealistic to expect developing countries to halt deforestation for environmental reasons alone. Developed countries, the U.S. in particular, cannot muster the political will to accomplish this. Today, the immediate priority of developing countries is the debt crisis. Or perhaps it should be called the "bad-lending crisis." Existence of the secondary market proves that many debts are not being serviced and will never be paid in full.[20] And debt swaps offer something in return. Is not the conservation of natural resources a fair swap?

REFERENCES

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

[2]U.S. Congress, Joint Economics Committee, Subcommittee on Economic Goals and Intergovernmental Policy Managing the Debt Problem. Hearing, 99th Congress, 2nd Session. Jun. 23, 1986. Washington, D.C.: G.P.O.

[3]Hino, H., IMF-World Bank Collaboration. Finance and Development. September 1988.

[4]Debt Crisis Network, "From Debt to Development." Washington D.C.: Institute for Policy Studies 1985

[5]Bird, G.R., *International Financial Policy and Economic Development: A Disaggregated Approach*. New York: St Martin Press 1987

[6]World Bank. "World Development Report." New York Oxford Press 1988.

[7]Debt Crisis Network, "From Debt to Development." Washington D.C.: Institute for Policy Studies. 1985.

[8]Wertman, Patricia, "The International Debt Problem: Options for Solution." Washington, D.C. Congressional Research Service, Library of Congress. 1986.

[9]Mathews, Jessica Tuchman, "Redefining Security." *Foreign Affairs*, Winter 1989. p. 165.

[10]Petesch, Patty, "Tropical Forests: Conservation with Development?" Overseas Development Council, Policy Paper No. 4. 1990.

[11]Downing, T.E. and G. Kushner, "Human Rights and Anthropology." Cultural Survival Report 24. Cambridge: Cultural Survival, Inc. 1988.

[12]Conservation International, "The Debt-for-Nature Exchange: A Tool for International Conservation." Washington, D.C. 1989.

[13]Cody, Betsy, "Debt-for-Nature Swaps in Developing Countries: An Overview of Recent Conservation Efforts." Congressional Research Service Report for Congress. 88-647 ENR. Washington D.C.: Library of Congress. 1990.

[14]Bramble, Barbara J. and Brent H. Millikan, "External Debt, Democratization, and Natural Resources in Developing Countries: The Case of Brazil." Washington, D.C.: National Wildlife Federation. 1990.

[15]International Bank for Reconstruction (IBRD), Articles of Agreement of IBRD (as amended). TIAS 1503; 3 Bevans 1390; 16 U.S.T. 1942; TIAS 5929. 1945.

[16]Holden, Constance, "The Greening of the World Bank." *Science*. June 1988.

[17]Thomas, V. and A. Chhibber (eds.), "Adjustment Lending: How it has Worked, How it can be Improved." Washington, D.C.: World Bank. 1988.

[18]Lovejoy, Thomas E., "Nothing, Nothing at All?" American Insitute of Biological Sciences 39th Annual Meeting. University of California at Davis. 1988.

[19]Conservation International, "The Debt-for-Nature Exchange: A Tool for International Conservation." Washington, D.C. 1989.

[20]Eberstadt, N.N., "How Creditworthy is the World Bank?" *New York Times* March 1, 1988 p. A23

DEBT-FOR-NATURE EXCHANGES AND BIOSPHERE RESERVES

Experiences and potential

Peter Dogsé
Bernd von Droste

Addresses of the authors of this report

Peter Dogsé
Department of Economics
University of Stockholm
10691 Stockholm, Sweden
Presently at
Division of Ecological Sciences
Unesco
7, Place de Fontenoy
75700 Paris, France

Bernd von Droste
Division of Ecological Sciences
Unesco
7, Place de Fontenoy
75700 Paris, France

Overall direction: Bernd von Droste
Series editor: Malcolm Hadley
Computer assisted layout: Ivette Fabbri
Cover design: Jean-Francis Cheriez
Photograph on back cover: Costa Rican Bank Note incorporating an allegory of rural life in 19th Century Costa Rica, depicted in a fresco in the National Theatre. J. Villa. 1897.
Suggested citation: Dogsé, P.; von Droste, B. 1990. *Debt-for-nature exchanges and biosphere reserves: experiences and potential.* MAB Digest 6. Unesco, Paris.

Published in 1990 by the United Nations
Educational, Scientific and Cultural Organization
7, place de Fontenoy, 75700 Paris
Printed in the workshops of Unesco

PREFACE

About this series...

The MAB Digest Series was launched by Unesco in 1989. Several types of publication are included — distillations of the substantive findings of MAB activities, overviews of recent, ongoing and planned activities within MAB in particular subject or problem areas, proposals for new research activities.

The target audience varies from one digest to another. Some are designed with planners and policy-makers as the main audience in mind. Others are aimed at collaborators in the MAB Programme. Still others have technical personnel and research workers as the target, irrespective of whether or not they are involved in MAB.

...and MAB Digest 6

This paper presents an overview of one set of mechanisms for investing in conservation and sustainable development - the so called debt-for-nature exchanges or swaps. The digest provides background to the origins and workings of the debt-for-nature instrument, and attempts to assess the benefits, constraints, limitations and future prospects as perceived by different interest groups.

The digest is an example of the increasing concern within MAB for issues at the economics-environment interface, reflected in one of the four new MAB research orientations on "Human investment and resource use" (see MAB Digest 2), which provided an important stimulus for this paper.

Some of the material in this digest was brought together for an invited contribution presented by the authors to an international symposium on "Man and his environment: Tropical forests and the conservation of species" held at the Pontifical Academy of Science in the Vatican City from 14-18 May 1990. The paper was subsequently distributed in draft form for review and criticism. Thanks are due to Daniel H. Janzen and Dana Silk, among others, for their suggestions. Errors and misrepresentations remain the responsibility of the authors.

It is hoped that this digest will be of interest to those wishing to learn more about the debt-for-nature exchange mechanism and its applications, and more generally to those concerned with issues relating to economics and environment.

Within the MAB Programme, the digest may provide ideas to those in a position to facilitate the conversion of debts and channeling of money for use in conservation and natural resource management projects: debt-holders, non-governmental conservation groups, biosphere reserve management agencies, MAB National Committees and collaborating research institutions, etc.

The topic addressed in this digest is one in rapid evolution. As such, the authors and Unesco would be grateful to readers for corrections and supplementary information, including concrete suggestions on how advantage might be taken of innovative financing mechanisms such as debt-for-nature exchanges in attaining the goals of programmes such as MAB.

CONTENTS

SUMMARY

Debt-for-nature exchanges or swaps are one set of mechanisms for investing in conservation and sustainable development. The roots of the mechanisms lie in the Third World debts that can be bought at discount in the second hand debt market.

As of October 1990, some US $15 million have been invested by industrialized countries and various conservation and development groups in purchases of US $95 million of face value Third World debts, which then have been exchanged with the debtor countries for roughly US $58 million in conservation and sustainable development funds and bonds. These funds now support environmental programmes in a dozen countries, as indicated in a tabular summary of all debt-for-nature agreements that have been made to date.

The paper starts with an explanation of the debt-for-nature concept, followed by a more detailed evaluation of exchanges performed in connection with biosphere reserves, drawn principally on three examples from Latin America (Bolivia, Costa Rica and Ecuador). Guidelines are presented regarding how experiences gained from these agreements could be incorporated into future debt exchanges. Political, economic and institutional factors and changes influencing the potential for debt-for-nature ventures in different regions of the world (Latin America, central and eastern Europe and Africa) are also examined.

The case studies presented in this report, illustrate that debt-for-nature exchanges do work and that they can be a viable, if somewhat complicated funding mechanism. The continuing debt crises and the worsening environmental crisis, provide considerable opportunities for various debt-for-nature enterprises. All parties involved (e.g. debtor countries, conservation investors, creditor banks) can benefit from debt-for-nature programmes. But the time available for such exchanges is probably limited, and more effort should be spent on

examining the possibilities for achieving large-scale, internationally co-ordinated operations that link new money with debt reduction for sustainable development projects.

Finally, therefore, a proposal for the establishment of an international fund for exchanging debt for the sustainable management of biosphere reserves is presented. Because of their characteristic emphasis on conservation in connection with sustainable development of human activities, the premise is that biosphere reserves will be able to attract more swap capital in the future. Such a fund would, however, not only be open for capital going into traditional conservation projects, but also for other investments in connection with a reserve. Given the approval and support from debtor governments, concerned local communities and interest groups, these programmes could include transfers of environmentally sound technologies, sustainable energy production, production and marketing of sustainable natural goods and environmental services, training and education, infrastructure improvements, and natural history oriented tourism development.

It should be emphasized, however, that the debt-for-nature instrument is not the solution to the elimination of the debt crises. Furthermore, it will not be possible to satisfy the increasing need of environmental related investments in the Third World through debt-for-nature swaps. On the other hand, a fair number of debt-for-nature (and debt-for-development) negotiations are underway, involving a wide range of countries, topics and concerns. The promise is that the instrument may come to play a less marginal role in respect to how environmental related investment needs may be relieved in the future.

INTRODUCTION

Most countries suffer today from internal and (transboundary) external environmental degradation (e.g. chemical pollution, loss of fertile soils, lack of fresh water, desertification, deforestation, irreversible loss of biological and genetic diversity). This degradation is among the reasons contributing to the need for investment in natural resource management and to the recognition that the capital needed for such investments in the 1990s is greater than in any preceding decade[1]. Several factors indicate, however, that countries in the South as well as in central and eastern Europe will face serious difficulties in finding the resources necessary for bringing about such large scale investments. Among these factors are debt crises, slow economic progress, lack of capital, low credit worthiness, capital flight, rapid population growth, inequity and political instability. Governments, non-governmental organizations (NGOs), bilateral aid agencies, and institutions in the United Nations system, interested in sustainable development, are consequently looking more and more into the whole "problematique" of environmental management financing (see for example World Resources Institute 1989, Conservation International 1989, Hansen 1988, Tarquinio 1990).

Debt-for-nature exchanges (or swaps), which were developed in the mid-1980s when Third World debts appeared at discount in a second-hand debt market, constitute one new type of instrument that seeks to ex-

1. Estimations by the World Resources Institute (WRI) show that US $20 to $50 billion per year will be needed in developing countries for nature conservation alone over the next decade (WRI 1989). Note that throughout this digest, the term "billion" is 1000 million and "trillion" is 1000 billion.

45-752 - 91 - 3

plore the possibilities for linking additional money for the environment (i.e. capital that would not be available for other environment programmes) with debt reduction, in projects in the debtor country.

However, challenges facing decision makers in the 1990s are further complicated by the fact that most countries lack examples of successful sustainable development paradigms that could be adopted if capital were made available to them. Indeed, increased capital stocks (created, for example by reducing the debt burden) can, of course, be invested in unsustainable resource use activities that earlier were unaffordable, making the environmental situation worse (Hansen 1988, page 5). Solving the debt crises alone, is, therefore, no guarantee for reduced environmental degradation. Innovative approaches are needed which incorporate the environmental together with socio-economic components in the development process, and in the management of investment capital.

The biosphere reserve concept (adopted by Unesco in the early 1970s) is one of the few explicit models for illustrating the links between environmental and socio-economic factors, emphasizing the parallel objectives of conservation of resources together with economic development (see Annex 1). Biosphere reserves (in mid-1990, there are 283 reserves in 72 countries covering an area of 1,500,000 km^2) have, however, not always reached their full potential in promoting the combined goals of development and conservation. A frequent explanation for this situation, particularly for Third World countries, is their lack of management and investment resources.

The objectives of this paper are, therefore, to familiarize the reader with debt-for-nature exchanges as one instrument for sustainable development investments, and to evaluate their benefits, constraints, limitations and future prospects from different perspectives. It includes an examination of some debt-for-nature exchanges where biosphere reserve management funding has been part of the agreement (i.e. Estacion Biologica Beni, Bolivia; Archipielago de Colon (Galapagos), Ecuador; Reserva de la Biosfera de Yasuni, Ecuador; and Reserva de la Biosfera de la Amistad, Costa Rica). Although only one among several financing alternatives, we believe that these experiences can prove useful for management authorities interested in financing related issues, as well as for creditor banks and debtor governments, who are (or could be) considering future exchange activities.

THE DEBT-FOR-NATURE MECHANISM

Third World lack of investment capital

Conservation, and environmental issues at large, deal, in economic terms, with the balance between immediate consumption on the one hand, and investments on the other. In many countries, debt crises have helped push this balance far away from any sustainable equilibrium. This imbalance can often easily be recognized in countries which in their attempt to earn hard currencies (e.g. US dollars) draw heavily upon their natural resource base, e.g. several tropical hardwood exporting countries.

Developing countries as a whole have experienced negative net capital outflows since 1984 (see Figure 1, page 14). In 1988, the negative transfer of capital to the Third World amounted to US $50 billion[2] (World Bank 1989). The debt crises have also led to decreased investments in many developing countries. This is illustrated in Figure 2 (page 15), which shows investments in percentage of GDP[3] between 1980 and 1988 in Latin America (including the Caribbean) and in Africa. Investments have fallen in these regions from 25% of GDP in 1980 to 16% in 1988 in Latin America, and from 21% to 14% in Africa. Shortage of investment capital is likely to strike hardest against investments in projects that

2. Total disbursement ($92 billion) - total debt servicing ($142 billion) = net outflow ($50 billion)
3. Gross Domestic Product (GDP) measures the total output of goods and services produced by an economy for final use.

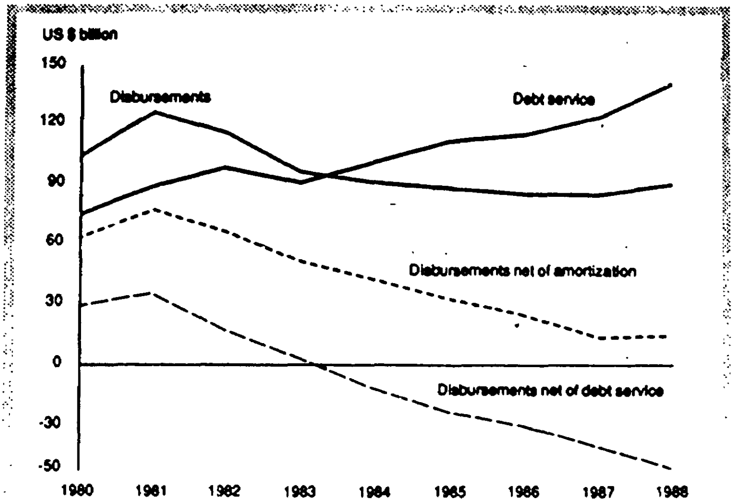


Figure 1: Disbursements, debt service (net flows and net transfers; all developing countries). *Source*: World Bank 1989.

generate benefits far in the future, such as investments in conservation and biosphere reserve management. Under such circumstances, most investments will be focused upon projects with safe, short-term returns, and on programmes absolutely necessary for immediate survival. At the same time, potential environmental costs frequently are neglected[4]. Even if negative environmental impacts are known in advance, it is usually argued that developing countries cannot afford (the luxury of) not bearing these environmental costs, and that such problems can be managed successfully later when the country has reached a higher income level.

It might, of course, be true that many negative environmental impacts can be solved later on, but in those cases where the 'development' process causes irreversible consequences, such as species loss, there is no possibility to restore the loss at all. The debt burden, followed by increased exploitation of natural resources and by lack of investment capital, has become a major constraint on sustainable development efforts in

4. Such investment patterns are also common, however, in situations where investment resources are abundant.

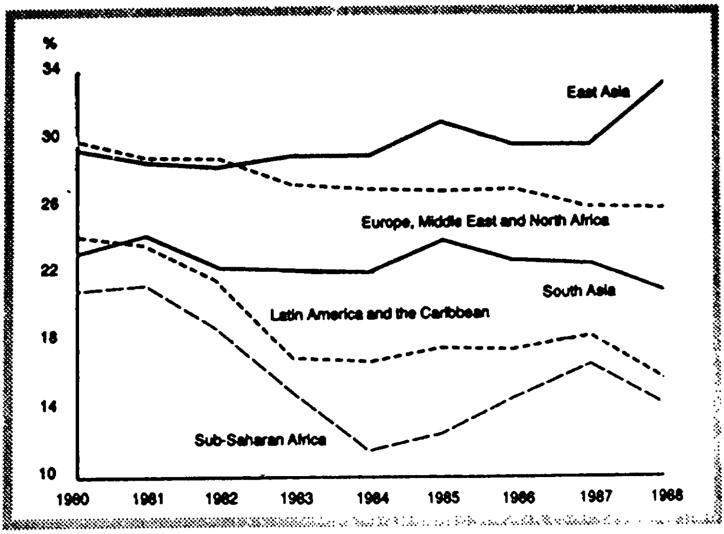


Figure 2: Investment-to-GDP Ratios (percentages). *Source*: World Bank 1989.

developing countries, and is therefore a potential major global environmental hazard. Inventiveness and the development of (new) financial instruments, and the identification of additional capital sources (beyond those necessary for servicing the debts) through which sustainable Third World investments can be realized, are priority areas in international concern.

Of course, the elimination of the debt crises alone, is no guarantee that those countries benefitting from increased financial capital stocks will automatically make investments in projects that reduce rather than increase mismanagement of their natural resources. Such efforts, to be successful, will have to involve close co-operation between economists, funding agencies, environmentalists and politicians.

Secondary market for Third World debt

A secondary market for Third World debt emerged in 1982 as a consequence of the accelerating international debt crises[5]. Certain heavily indebted developing countries could at that time no longer service their debts and some private banks therefore found themselves better off selling these so-called 'non-performing' loans (i.e. credits that are not repaid according to the loan agreement) at a certain loss, rather than keeping the debts. The trade volume of Third World debt was small in the beginning, because the number of interested buyers was very limited, but the second hand debt market has, due to increased interest from both the supply and the demand side, grown considerably since then[6].

Creditors have had to get used to the idea that they will lose money on their Third World debts, as the debt crisis only seems to get worse. The question facing many banks today is how they can minimize the loss, or the risk of future losses (Huizinga 1989). This fact, as well as important tax legislation reforms in industrial countries, e.g. the United States (Cody 1988), have made it more interesting for private banks to enter the debt market and sell (or donate) their debts.

So far, mainly private banks are active in this trade, because national banks and multinational development banks are often tied to international policies and agreements, such as the Paris Club, which inhibit them in the first place from selling their debt[7]. Buyers, on the other hand, are attracted by the possibility of buying debts at significant discount.

This debt discount is actually the motor in today's **debt conversion** activities, i.e. the exchange of one form of claim on a debtor country for another form of claim, such as debt-for-nature swaps. Table 1 gives a synopsis of the different debt conversion categories that are employed today.

5. Triggered by Mexico announcing that it no longer could service its debts.
6. US $1 billion of debt traded annually during the first years. US $50 billion turnover estimated for 1990, including inter-bank debt transfers (Wagner 1990).
7. Several institutions, governments, etc., argue that multilateral development banks should be able to engage in debt-for-nature swap activities. The US Congress 'Tropical Forest Protection Act', H.R. 3010 and H.R. 4957, suggests that the World Bank should be allowed to use its credits in swap programmes. The involvement of national and multinational banks is furthermore a prerequisite for larger debt swap activities in countries that owe only minor amounts of their total debt to private banks, such as most African nations.

TABLE 1: DEBT CONVERSION CATEGORIES

Debt-for-equity swaps

Conversion of external debt into some form of equity, such as land, companies or industries. Instead of servicing debts the debtor transfers ownership of national equity to the creditor.

Debt-buy back

Re-purchase of a debtor's debt in cash in the secondary debt market.

Debt-debt swap

Interchange of foreign loans between creditors.

Debt-for-nature swaps

Class of debt-for-equity swaps where debts are bought at discount and exchanged for the debtor government's commitment to finance domestic environmental programmes in local currency

Debt-for-bonds

Exchange of debt for bonds of lesser face value but with guaran- -d principal (also called 'exit bonds')

The debt-for-nature exchange principle

The basic principle behind the debt-for-nature mechanism, first outlined by Lovejoy (1984), is that a debt holder negotiates with the debtor country on a deal where the former (the holder of the debt) forgives the indebted country's debt in exchange for the debtor government's commitment to invest in local currency in conservation and natural resource management projects in the debtor country.

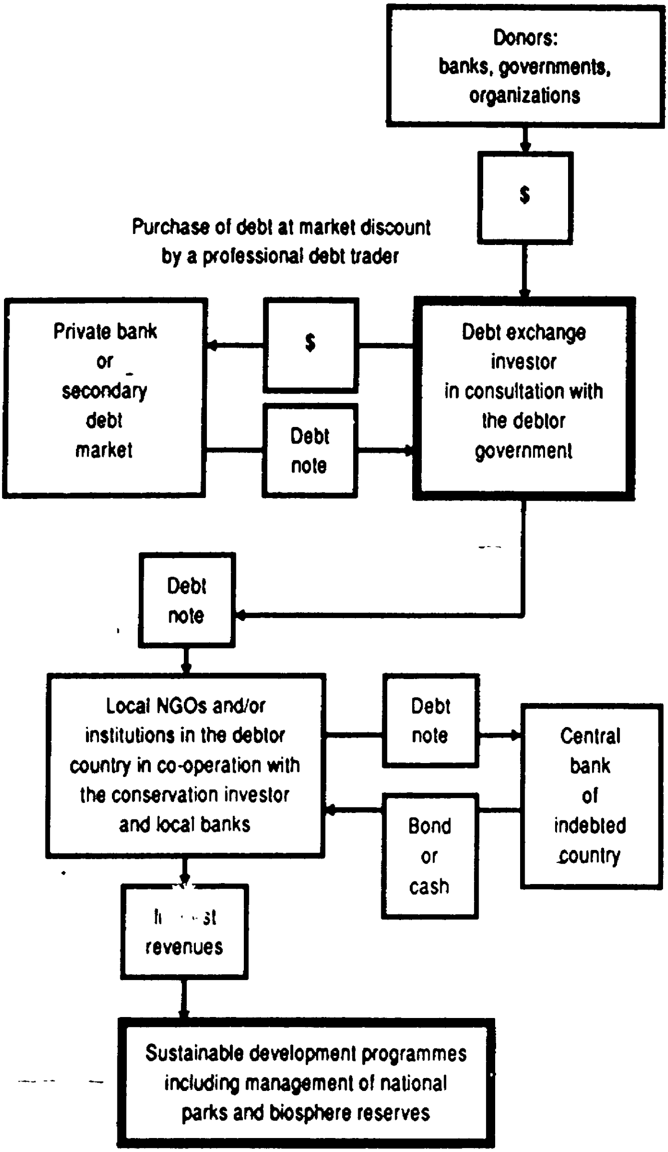


Figure 3: A simplified hypothetical debt-for-nature operation

This basically quite simple and straightforward idea includes, however, many sometimes difficult steps before such an agreement is reached. Before going into detail about the potential advantages of such agreements, we attempt to illustrate (Figure 3) the exchange process through a simplified hypothetical debt-for-nature operation. The different steps might be as follows:

1. The debt exchange investor reaches an agreement with an indebted country to initiate a debt-for-nature exchange dialogue.
2. The investor identifies donors (governments, banks, organizations or others) or puts aside regulatory funds of its own for the purpose of a debt-for-nature exchange. Contacts are made with actors in the second hand debt market so as to identify where, and at what price, the expected needed amount of debt can be bought.
3. An agreement is reached allowing the investor to exchange X $ of debt, for Y $ in local currency (bonds), which will be used for specific activities, Z, such as national park management or sustainable development programmes, to be co-ordinated by national NGOs and institutions in the debtor country[8].

   a) The investor buys debt in the second hand debt market, using a professional dealer, or gets it directly from creditor banks as donations;

   b) The debt is transferred to a private bank or to the State Bank in collaboration with national NGOs;

   c) The debt is exchanged for bonds or cash in local currency.
4. The proceeds from the debt-for-nature exchange are used in management of national parks, or in some other programmes in the debtor country, as agreed upon[9].

Before any such process starts, there should be a 'letter of intent' from the government in the country where the exchange will be performed, or preferably an already established debt-for-nature programme, so as to minimize the risk that effort will be spent in vain on negotiations that were doomed to fail, as debt exchange negotiations often take a long time and therefore can be costly. The debtor country, of course, has the right to decide whether and which part of its debt can be used in debt-for-nature swaps. Debtor countries also specify subject areas eligible for swaps and

8. Exclusive control over the proceeds should not be given to the investor as this could be interpreted as foreign intervention in national affairs, nor should it be given to the government directly, because of the risk of misuse of the proceeds.
9. For more information on the exchange process see, for example, The Debt-for-Development Coalition, 1990.

regulate the size of any such investments. This implies that government can adopt debt-for-nature programmes that maximize expected benefits to the country.

Such programmes have therefore been seen as multiple-purpose instruments:

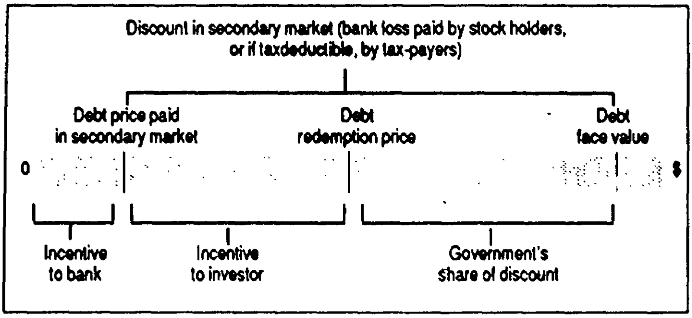
1. Since debtor governments usually redeem (exchange) the swapped debt at less than its face value, swaps enable governments to retire debts at a discount;
2. The debt is being renegotiated into long-term bonds, which further ease payments compared with what would have been paid out in interest in US $ on the original loan;
3. Governments redeem the debt at a higher price than its present market value, resulting in reduced investment costs for the conservation investor;
4. Debtor governments can reach agreements on initiating projects that safe-guard (or increase) the production of domestic environmental goods and services;
5. Creditor banks can sell non-performing debts and thereby reduce their loss.

The allocation of these discounts between the different actors is illustrated in Box 1. Regarding the allocation of environmental goods and services, some services may not only benefit the country in which they are maintained but the whole international community, e.g. maintaining species diversity and the contribution of tropical rain forests to a stable climate[10]. This fact can help explain the conservation investor's interest in the exchange.

The debt-for-nature programmes that have been performed, as of October 1990, are summarized in Annex 2.

10. These services can be classified as international environmental public goods.

Box 1. Allocation of Secondary Debt Market Discounts



The figure shows the monetary incentive allocation, as represented by the secondary market debt discount distribution between the actors (the initial creditor bank that sells the debt, the investor that buys the debt and the debtor government). The secondary debt market price is the price that the investor has to pay the creditor bank for the debt. The redemption price is the amount of local currency the investor gets from the debtor government in exchange for forgiving the debt. The face value represents the amount of money borrowed.

- The incentive to the investor is the difference between the amount paid for the debt notes (the secondary market price) and the amount obtained in local currency for the debts (redemption price).

- The incentive to the government is the difference between the redemption price and the debt's face value. In addition the government's expenditure will be invested in the country and not abroad.

- The incentive to the bank, in a situation where the debts are not expected to be serviced, is simply the market price. The bank will, of course, still get a loss (however reduced) representing the difference between the face value and the market price. This loss, if tax deductible, will be covered by tax payers in the country where the bank is registered. If it is not tax deductable, stock holders will take the loss.

To some extent, it might be correct to conclude that the debt-for-nature exchange is a transfer of capital from taxpayers in the North benefitting conservation measures in the South. However, it is also true that banks in the North in many cases have made substantial interest revenues on their Third World loans before debtors stopped servicing their debt - revenues that benefitted share holders in the North.

Benefits and disadvantages of debt-for-nature exchanges

There are three major actors participating in debt-for-nature exchanges: the debtor country, the conservation investor[11] (institution, NGO, etc.) that buys the debt, and the creditor bank that sells the debt[12] (although in practice, several intermediate players are also involved, e.g. donors and professional debt traders). All parties can benefit (financially or in other terms) from a debt-for-nature exchange (there would likely be no deals otherwise), but there are also costs involved which may make some exchanges less interesting. Potential benefits and disadvantages for the actors are listed in Table 2. The relative importance of their values will, of course, differ from case to case, as well as between the actors.

The debtor country

The benefits a debtor country can derive from debt-for-nature exchanges can be divided into three groups: economic, environmental and goodwill values. Increased credit worthiness might be one indirect effect following debt exchange programmes, producing economic benefits in addition to the direct incentives already described in Box 1. Additional capital, beyond the funds necessary for coping with the debt, is, as mentioned earlier, crucial for the outcome of Third World development efforts. Improved credit rating is, therefore, one important factor insofar as it makes a country more attractive for domestic and foreign investments and for new credits. Furthermore, it may also be helpful for a country struggling to reverse (legal and illegal) capital export flows, the sum of which constitutes the major part of several developing countries' outstanding debt today[13].

11. The term conservation investor is often used here but it is not intended to suggest that debt exchanges only have to focus on conservation.
12. The creditor bank might have sold the debt to a professional debt trading office from which the investor buys it, and will therefore not necessarily be informed, or engaged in, how it later will be used. The following discussion concerning the creditor banks' potential benefits and disadvantages from debt-for-nature exchanges is therefore primarily valid in those cases where the bank is more actively involved in the exchange process.
13. Roughly 50% of the money lent to Third World countries in the past decade fled abroad (i.e. assets own by non-bank private sector citizens of the 15 big debtors). The Economist, 1989.

TABLE 2: Potential benefits and disadvantages from debt-for-nature exchanges for the debtor country, the conservation investor and the creditor bank.

Debtor Country

POTENTIAL BENEFITS

- Debt reduction (at discount)
- Reactivate (additional) domestic and foreign investments
- Improved credit worthiness
- Environmental benefits
- International goodwill
- Increased environmental awareness among politicians and bankers

POTENTIAL DISADVANTAGES

- Higher inflation rate
- Crowding out of domestic expenditure
- "Overpayment" in redeeming the debt
- Public reaction against any sort of debt negotiations
- Public misinterpretation of sovereignty issues
- Locking up natural resources for conservation
- Small swaps may be inadequate in changing underlying causes of resource misuse

Conservation Investor

- Reduced investment cost (discount on foreign exchange)
- International goodwill and publicity
- Strengthened links to banks and financial institutions
- Financial know-how

- Restrictions in investment opportunities
- Inflation
- Currency exchange risks
- High transaction costs (time consuming negotiations)
- Risk that governments do not honour their commitment
- Small swaps may be inadequate in changing underlying causes of resource misuse

Creditor Bank

- Clearing books of problematic (non-performing) debts
- Improved business relations with debtor country
- Goodwill (if debts are donated)
- Banks that can combine finance and environmental issues will be better prepared to take advantage of the expected future increase in environmental related investments

- Loss on balance sheets
- Moral hazard (reduced debt servicing discipline)
- Produce benefits to 'free-riding' competitors

Source: Dogsé 1990.

The most obvious benefits from debt-for-nature exchanges are, however, their contribution to the conservation and natural resource management budget. This said, the values derived from better managed resources are often far from easy to quantify in economic terms, resulting in such benefits often being ignored, or underestimated, by decision makers and by the public at large. Linked to other economic incentives, such as those noted above, these environmental values will become more explicit, especially since someone is obviously prepared to pay for their maintenance, i.e. the conservation investor[14]. In situations where voters would prefer that public funds were spent on projects generating immediate monetary proceeds, rather than on the environment, the debt-for-nature exchange mechanism might make it easier for a government to justify that investments are also made in projects with long term environmental benefits, since these disbursements will be offset by monetary debt reduction benefits.

The goodwill value for active investors, donors and debtor countries should probably not be underestimated. The first exchanges that were made attracted considerable publicity, mostly of a positive character. Goodwill for the debtor country can include the fact that tax payers in the North recognize the debtor's efforts and commitments by promoting increased capital transfers to the South. Future deals, however, will probably receive less publicity and therefore bring somewhat less goodwill to the parties involved, unless the agreements cover larger sums or include some new, innovative investment option in the debtor country. Debt-for-nature talks include the active participation of banks and other credit institutions which will increase the probability that these groups become more aware of environmental problems - awareness that could lead to environmentally non-sustainable projects finding it somewhat more difficult to attract investment capital.

The criticism of debt-for-nature exchanges, from the debtor country's point of view, has often been focused on their potential impact on the debtor country's inflation rate. By distributing the payment of the swap proceeds over several years (by issuing long-term bonds for example) this risk could be reduced. Furthermore, the actual amount of capital

14. Some readers might argue that conservation investors invest in programmes that meet their own preferences and not necessarily those of the population in the debtor country, and that capital therefore might be diverted away from more important domestic programmes.

spent in debt exchange countries is in this context small and will therefore only have insignificant inflationary impacts[15]. Because of their relatively small size, debt-for-nature exchanges have, on the other hand, been criticized for not being able to address effectively the underlying causes for why resources are misused (Pearce 1990a). Instead, swaps might give people the impression that natural resources are managed in a sustainable way in general, when this is the case only in a few areas.

Swaps are also criticized because they appear to legitimize what many consider to be illegitimate debts. Any (positive) redemption price is argued to be too high. Other critics turn this argument around, stating that swaps only benefit those countries which have deteriorated economies and environments, and that debt-for-nature exchanges might, therefore, function as incentives for advanced economic and environmental degradation.

Finally, debt-for-nature exchanges have been criticized for not really contributing to any significant debt reduction (the total Third World debt is more than US $1.3 trillion and the total exchange sum, as of mid 1990, approximately US $100 million). Measured on a national basis, however, debt-for-nature exchanges have had quite an important debt reducing function. Costa Rica is the best example as 5% of the country's commercial debt has been exchanged in debt-for-nature programmes (Umaña Quesada 1989). Furthermore, the debt-for-nature instrument is a relatively new mechanism, and the goal has not primarily been to make cuts in the debt but to fund natural resource management investments. With growing experience, improved co-ordination and an expanded exchange menu, the contribution to debt reduction could increase in the future. The Dominican Republic's debt-for-nature programme, established in March 1990, supports this scenario. The US $80 million debt to be exchanged over four years for conservation bonds represents 10% of the Dominican Republic's outstanding foreign commercial debt (see Annex 2).

15. A study made at the request of the Costa Rican government concluded that, if Costa Rica spent US $ 50 million in local currency generated by debt exchanges in one year, the increase in inflation would be less than 0.5% (Umaña Quesada 1989).

The conservation investor

The benefits that the conservation investor can gain from debt-for-nature exchanges include reduced investment cost (illustrated in Box 1), goodwill, publicity, and strengthened links to banks and other financial institutions, as well as improved working relation wih governments and local management authorities. Debt-for-nature swaps might also produce financial know-how of value to the investor.

Factors that could be mentioned as possibly negative for the investor include restrictions in the projects that are available, because not all programmes suggested by the investor might meet the approval of the debtor country. Inflation might reduce the value of debt-for-nature proceeds unless they are protected from price rises. The process of reaching a debt-for-nature agreement is complex, uncertain and time consuming. The costs (measured in time, personnel, travel, stress, etc.) of achieving the deal might, therefore, be high and reduce the value of the exchange. This was certainly true for the first exchanges that were made. It is possible, however, that the actors who participated in debt exchange negotiations will gain experience that will enable them to reduce these costs.

One oft-raised concern is that debtor governments are not more bound to fulfill a debt-for-nature agreement than they were to service the initial debt (which they did not). Thus, the conservation investor faces the risk that the debt exchange proceeds will not be made available according to the contract. This being said, debtor governments have, in the case of a debt-for-nature exchange, the possibility to bargain deals that are comparatively much easier to meet than any original debt service agreement, including repayments in local currency. Furthermore, the money does not leave the country and is invested in government approved projects. The large interest of the international community in debt-for-nature deals is also a factor that should inhibit debtor countries from not fulfilling their commitments.

Another danger which has been expressed by authors like Barton (1989) is that, being forced to negotiate with governments and representatives of banks and other financial institutions, conservation investors might become more susceptible to accepting activities suggested by such actors, which would not necessarily benefit conservation or local people.

Indigenous Latin American groups have actually criticized swaps made in connection with land that they argue belongs to them;

> ... they (swaps) cannot take place with our land because that debt is not ours; we have not contributed in any way to that debt [16].

The conservation investor could, on the other hand, stress the needs of local populations in negotiations with the debtor government, thereby improving the situation of those populations. The worldwide charity for indigenous people, Survival International, has actually proposed that the debt exchange mechanism should be used for debt-for-indigenous-territory swaps (Pearce 1990b).

The creditor bank

One obvious benefit from debt exchanges for creditor banks is that they provide one way of clearing the books of non-performing debts at a positive price (the value of which is described in Box 1). Banks that makes their debt bills available for debt-for-nature exchanges might also be perceived by debtor governments as interesting partners for future collaboration, including the possibility that any additional debt owed to these banks will be given priority the day the debtors are able to service their debts again.

The amount of capital directed toward the environment sector (for conservation, pollution control, sustainable energy production, etc.) in the coming years, in both the developing and in the industrial world, is expected to be multiplied[17]. 'Green' banks, which specialize in environmental projects and have links to the conservation community, ministries of environment, national environmental protection agencies, and industries working with environmental technology, will have comparative advantages in dealing with this new market. Debt-for-nature exchange enterprises can therefore be one way of achieving such links with conceivably important future business partners. They can also transfer

16. Statement by the Coordinating Body for the Indigenous People's Organisations of the Amazon Basin. In J. Rocha, 1990. 'Voice of the wilderness'. *The Guardian*. 3 August 1990.
17. This trend is already notable. Du Pont, for example, allocated US $70 million for research and capital expenditures to develop alternatives to CFC's in 1988 (Environmental Business Journal, Vol. 2, No. 5, May 1989. p.10)

the image of the 'green' bank to a public increasingly concerned about the environment with the possibility that the bank's market share of private customers increases.

Potential disadvantages include the fact that when the bank sells or donates the debt it will appear as a loss on the balance sheets. Banks have often, however, already registered their non-performing Third World holdings as losses in the books; therefore, selling them to the conservation investor will not imply any further losses. Some countries have also adopted accounting and tax regulations that aim at reducing banks' losses from debt sales or debt donations and to stimulate debt reduction programmes, e.g. the United States Revenue Ruling 87-124 (Lamp 1988). Moral hazard is another potential negative aspect that banks might have to consider. Moral hazard implies, in this case, that debtor countries' debt-servicing discipline in general might be reduced due to a raising of the debtors' expectations of not having to service the debt according to the initial credit agreement, but rather according to a less demanding debt-for-nature deal.

Debt reduction programmes increase the possibility that the debtor country can service (parts of) the remaining debt. Some banks might then act as 'free-riders' (i.e. they do not enter debt reduction negotiations or never sell their debt at a discount), hoping that their debts will be repaid. Banks involved in debt-for-nature swaps might, therefore, produce advantages to their free-riding competitors.

BIOSPHERE RESERVES AND DEBT-FOR-NATURE CASE STUDIES

Bolivia: The Beni Biosphere Reserve

Background to the agreement

Bolivia is the first country to have reached a debt-for-nature agreement. The Bolivian government signed the deal in July 1987 with Conservation International (CI), a Washington-based non-profit NGO, after eight months of negotiations[18]. CI bought, through Citicorp Investment (a Citibank subsidiary), US $650,000 of Bolivia's debts from unnamed private debt holders for US $100,000 (donated to CI by the Frank Weeden Foundation), which meant that CI got one dollar of Bolivian debt for about 15 cents. The agreement states that:

1. Bolivia will be given the right of writing off the US $650,000 debt obligation in exchange for the establishment of a local currency endowment fund equalling US $250,000[19]. The proceeds from this fund,

18. Conservation International is a new organization set up in 1987 by staff members from the Nature Conservancy, which had worked in Bolivia for a long time and had been active in the creation of the Beni Biosphere Reserve in 1982.
19. $ 100,000 in pesos from the Bolivian government, $ 150,000 in pesos from the USAID (US Agency for International Development) using its local currency PL-480 funds (Public Law 480 which gives the U.S. government the possibility to buy and transfer domestic agricultural surplus to Third World countries which in exchange make local currency available for investments in developing projects in their own country). USAID has adopted a Debt for Development Initiative, allowing purchases of debt using its foreign assistance funds, through which USAID will support certain development assistance programmes of non-governmental organizations in Third World countries (USAID, 1989).

administrated by the Bolivian National Academy of Science, and the Ministry of Agriculture and Peasant Affairs[20], are to be used for covering management and protection costs of the Beni Biosphere Reserve.

2. Furthermore, the Bolivian government promised that the highest degree of legal protection for the Beni Biosphere Reserve would be enforced, and agreed to establish three buffer zones adjacent to the reserve: Chimane Sustainable Production Forest (670,000 ha), Cordebeni Watershed Protection Zone (225,000 ha) and Yacumi Regional Park (130,000 ha).
3. CI would also support the implementation of the programme by providing scientific, technical or administrative assistance.

Execution of the exchange agreement

Implementation of the debt-for-nature agreement has been somewhat slow, primarily because of domestic financial and political constraints in Bolivia, and to some extent due to the lack of necessary administrative institutions, such as environmental NGOs. Based on a statement made by the Bolivian ambassador in Washington in connection with the announcement of the agreement, Bolivian newspapers published articles saying that it would result in conserved areas being given away to American conservation agencies, an impression which gave rise to immense public criticism. In fact, land ownership remained with the Bolivian government.

Because of these problems, the Bolivian government was not able to contribute its share to the management fund until April 1989. As USAID had decided not to pay its share until the Bolivian government had done so, it was not transferred until April 1989. This delay resulted in a calculated interest loss of US $60,000, because the money was to be placed in a dollar-denominated account shortly after the agreement had been signed. Furthermore, the Bolivian government had at that time still not strengthened the legal protection for the Beni Biosphere Reserve.

20. In cooperation with the Bolivian Interinstitutional Technical Commission which include representatives from the National Environmental Lealgue (LIDEMA), the Beni Biological Station, the Timber board of trade, and Conservation International.

Management problems with the Beni Biosphere Reserve

The management programme of the Beni Biosphere Reserve has also been subject to other problems, primarily intensive mahogany logging in the buffer zones, and difficulties in balancing territory claims made by three Indian groups living in the area with other interest groups and development activities. Furthermore, the reserve harbour some coca trade and possibly small coca refining factories, processing coca leaves from plantations on hillsides outside the reserve. Drug trafficking might prove to be an intractable constraint, restricting the development of sustainable, legal activities in the Beni area.

Logging activities

Shortly before the exchange agreement was signed, the Bolivian government gave seven logging companies the right to establish saw mills in the Chimane forest, a large buffer zone for the Beni Biosphere Reserve. No direct logging restrictions were enforced, however, except for a directive stating that timber companies active in the area would have to organize reforestation operations. The effect of this privilege was that 14% of the total Bolivian lumber harvest was taken from the Chimane forest in 1987, including 2500 mahogany trees, while no reforestation efforts were made (Collett 1989). In 1988, the number of trees logged in the area almost doubled. In 1989, therefore, the government decided to put a limit on the harvests. Mainly because of the debt-for-nature agreement and the planned reforestation programme, the International Tropical Timber Organization (ITTO) decided in December 1988 to grant US $1.26 million to the Bolivian government to support the forestry management plan. These funds have, however, been blocked because of disputes between conflicting interest groups in the Chimane forest, making the implementation of the plan difficult. Furthermore, the timber companies have so far showed very little interest in reforestation operations.

Indian communities

An estimated 25,000 Indians live in and around the Beni Biosphere Reserve. The Moxo indians (the largest of three Indian tribes living in the Chimane forest) claim 200,000 hectares of the forest (Collett 1989). The lumber companies oppose this claim and are not prepared to let go of any area which they say the government has entitled them to use. No thorough study of the Indian communities living in the Beni Biosphere

Reserve area were made before the agreement were signed. CI later on initiated a socio-economic study on the Chimane Indians, the first phase of which concluded in 1989. It proposes that Indian territories should be established, not as one large area, but as several somewhat smaller areas. The Bolivian government is said to be in favour of such a solution. The Indian groups, however, are not satisfied. They claim title to a larger area, and, as a demonstration against the way the government and Conservation International have handled their problems, have made a 40-day protest march to the Bolivian capital of La Paz (Ghazl 1990, Pearce 1990b).

Coca plantations

Coca cultivation has a long tradition in the Amazonian highlands. Because of increased international cocaine demand, coca plantations have been expanding rapidly. This has often had negative environmental consequences, such as indiscriminate deforestation, and polluted soils and rivers by fertilizers and toxic chemicals used in coca-leaf refining. Furthermore, traditional cultivation techniques which prevented topsoil erosion are frequently abandoned in favour of less labour intensive techniques that result in increased erosion problems. Chemical coca-plantation destruction programmes have been tried in Bolivia on American initiative, using strong chemical herbicides, with significant negative effects not only on the target coca-plantations but on the surrounding tropical rain forest ecosystem. In 1982, demonstrating peasants who relied on coca production and trade for their livelihood forced the United States to suspend a coca-plantation destruction programme using the herbicide 2,4-D (Brooke 1989).

The Bolivian President, Jaime Paz Zamora, does not believe that the coca problem can be solved simply by policing and outlawing of drug production and trade, which traditionally is the principal approach advocated by the US Drug Enforcement Administration. Instead, President Zamora argues that much more emphasis (and money) should be given to rural development, and that foreign markets should be more accessible for legal agricultural products from Bolivia (Christian 1989). In respect to the effects of coca cultivation in the surrounding hillsides outside the reserve, some scientists argue that, measured on an environmental basis, these plantations do not pose such a large threat to the forests as do many other activities, such as logging (legal and illegal). It is clear, however, that if coca plantations and drug trafficking are ever to be replaced by more socially acceptable but equally profitable legal activities, this process will require large amounts of international development aid.

Conclusions

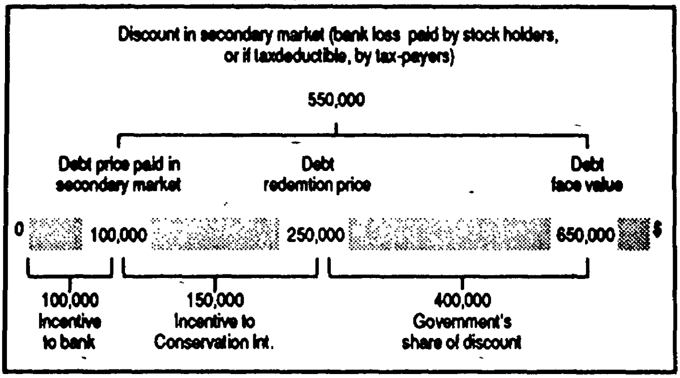
These problems connected with logging, indigenous peoples and coca plantations are not basically a consequence of the choice of funding mechanism. They should therefore not be used as arguments against the debt-for-nature instrument in general. On the contrary, this instrument can prove to be a useful and effective investment transfer mechanism for directing funds into projects which are trying to solve these problems. Nevertheless, the question of whether the debt exchange mechanism *per se* might lead to negative management effects not necessarily associated with other conservation funding arrangements is, of course, relevant and needs to be investigated further in the future as the deals mature.

Recalling Box 1 (page 21), the debt exchange agreement between Conservation International and the Government of Bolivia gives the monetary incentive allocation between the actors as illustrated in Box 2. Is this a good deal for the different actors? And is the agreement promoting the management of the Beni Biosphere Reserve? The banks lost US $550,000 by selling the debt to CI, compared with the debt's face value (interest payments are not included in the calculation). But the loss might have been US $650,000 if no second hand debt market had existed and Bolivia's debts continued to be 'non-performing'. So one could say that the bank's incentive was US $100,000. CI initially saved US $150,000, but then lost a calculated US $60,000 because of the Bolivian government's delay in making the local currency fund available, so the financial net surplus ended up at US $90,000.

The future interest value that the fund will produce depends on the Bolivian inflation rate. The real interest value[21] would diminish quickly in a situation of hyperinflation. The Bolivian government invested US $250,000 in local currency in exchange for cancelling US $650,000 of debt. Furthermore, USAID supported the government with US $150,000 in pesos, so the government's incentive in the deal was in fact US $550,000. If, however, the Bolivian government had planned to

21. Real interest rate = interest rate - inflation rate.

Box 2. Allocation of Debt-for-Nature Swap Incentives (US $)



Conservation International's incentive was the difference between what it had to pay for the debts in the debt market and the redemption price: ($250,000 - $100,000 = $150,000). The government's share of the discount was the difference between the face value and the redemption price ($650,000 - $250,000 = $400,000). The bank's incentive was the difference between the secondary market price and the best alternative capitalization value of the loans, in this case zero, because no interest was paid on the credit (see text for further discussion).

not repay the debt at all[22], the incentive to sign the deal would have been US $250,000. The above discussion only identifies monetary incentives, not intangible incentives, which, of course, might be of large value to the actors (recall Table 2 page 23).

Evaluations and presentations of the exchange in the media have primarily been focused on purely technical/financial details rather than on how the proceeds were to be used, or on how the funds actually are being or will be used. However, since the management funds were only established in April 1989, it is still somewhat early to discuss the effects of

22. Some observers argue that governments might find it difficult to gain support for debt-for-nature programmes in certain Latin American (and African) countries where public opinion believes that the debt crises not are a public responsibility, that the debts are il-legitimate and should not be serviced at all.

the swap. Unbiased evaluations of agreements such as the debt-for-nature exchange between Conservation International and the Government of Bolivia, are probably also somewhat difficult to accomplish, mainly because all the actors involved are anxious to show a positive picture of the deal, as negative publicity could be costly, i.e. it could prove increasingly difficult to attract donors to future (debt exchange) programmes.

As for the agreement's contribution to the Beni Biosphere Reserve management budget, it is clear that the reserve is receiving important financial support from the management fund. The interest from this endowment fund is primarily used for covering personnel, maintenance and infrastructure expenses within the reserve. Personnel has been recruited and trained for the Beni Forestry Service, and forest inventories have been undertaken. An environmental education programme including workshops on different natural resource and conservation oriented topics have been initiated. CI has also decided to invest additional money in research and training in connection with the reserve, including soil inventories, and studies on primates and water turtles. An interesting aspect of debt-for-nature exchanges is their multiplier effect, i.e. swap agreements often have a financial trigger effect, generating additional funds and donations from the actors initially involved in the deal[23] or from completely new sources, in this case the ITTO.

23. It has been estimated that the NGO that performs the swap will invest roughly two dollars in addition to every dollar invested in the swap to cover expenses for additional project opportunities, which often have been opened up because of the swap deal (personal communication at the First European Conference on Debt and Conservation, Zurich, 1989).

Costa Rica: La Amistad Biosphere Reserve

Background to the agreement

Costa Rica has the most ambitious debt-for-nature exchange programme to date. More than US $79 millon of debt have been exchanged for approximately US $42 million in bonds, favouring a wide range of conservation and development activities at La Amistad Biosphere Reserve and five other priority target areas in the country.

In August 1987, the Central Bank sanctioned its first debt-for-nature scheme, totaling US $5.4 million of commercial debt. In exchange for the debt notes, Costa Rica issued local currency (colones) stabilization bonds. The redemption price was 75% of the debt's face value, and the bonds yielded an average interest rate of 25%, with up to six years maturity: 25% of the bond value can be cashed after the fourth year of the transaction, while the remaining principal will continue to accumulate interest until all the bonds are exchanged. The proceeds payable quarterly on the bonds, which cannot be sold on the market, were used to establish the Natural Resources Conservation Fund. The $5.4 million limit, determined by the Central Bank, was reached in February 1988 and included active involvement of a large number of international NGOs and foundations[24]. These organizations donated US $900,000 directly to the Costa Rican National Parks Foundation (an NGO) which, together with the Neotropica Foundation and the Costa Rican Ministry of Industry, Energy and Mines, is responsible for the Fund. The National Parks Foundation then purchased the debt at a price of about 16 cents on the dollar.

The debt exchange agreement did not, however, only finance projects in La Amistad Biosphere Reserve, but also activities and programmes in other national parks and reserves in the country, as agreed upon by the donors and the National Parks Foundation[25]. The donation made by CI, US $50,000 converted into US $215,000 in bonds, was earmarked especially for La Amistad Biosphere Reserve. The overall objective was to

24. See Annex 2.
25 The following areas, besides La Amistad Biosphere Reserve, were classified as priority target areas for financial management support: Braulio Carillo National Park; Corcovado National Park; Guanacaste National Park; Tortuguero National Park; and Monteverde Cloud Forest (private reserve).

design and implement a co-ordinating plan to embody natural resource conservation with sustainable development and reserve management.

Financial evaluation of the 1987 Costa Rica debt exchange

Present value calculations can be used as a tool for investors for ranking investment projects. A debt-for-nature exchange is, of course, just one of many ways for NGOs and other organizations to invest in conservation and biosphere reserve management. A basic test could be to compare the present value of the debt exchange with the present value of having the money in the bank or buying local currencies at discount[26]. Present value can be interpreted as being the answer to the question "What is the value today of receiving a specific amount of money at a specific time in the future ?" Present value calculations include discounting, and the process of discounting is actually the opposite from compound-interest calculation, which gives an answer to the question "What is the future value (principal plus interest) from a given present value ?". The present value (PV), of a cash flow, can be calculated by using the following formula (Chiang 1984):

$$PV = \sum_{t=1}^{n} R_t(1+i)^{-t}$$

where

R_t = the revenue payable on the bonds every year (interest and principal);

n = number of years the bonds produce revenue;

i = the discount rate.

The fundamental practical rule of how net present value should be applied is as follows:

A project should be initiated only if its present value is positive. If several investment projects yield a positive present value, the project with the highest present value should be adopted.

26. Foreign currency can sometimes be bought at a discount (compared with official exchange rates) in free exchange markets, or from companies with blocked funds of surplus local currency which they are not allowed to use freely but which they might be interested in selling at a discount.

The net present value of the 1987 Costa Rica exchange cash flow is calculated in Table 3. The discount rate is set at 25%, which is equal to the interest rate on the bonds. The initial investment was US $900,000. No transaction costs, such as labour costs in negotiating the agreement, are included[27]. The bonds will produce an average annual interest revenue of US $1.01 million for four years (US $4.05 million in bonds, 25% interest). At the end of the fourth year, 25% of the bond value can be cashed (US $1.01 million), so the total revenue from the bond will then be the sum of interest and principal payments. After seven years, all bonds are cashed. All revenue is assumed to be consumed, and not reinvested in other bonds, etc. The present value of the total debt exchange deal is calculated to be US $3.14 million (given a stable US $/colones exchange rate, as the interest is paid in colones: if the exchange rate falls (i.e. $/colones falls), then the PV of the swap also falls).

Costa Rica had an annual average inflation rate of 28.6% between 1980-87 (World Bank 1989). One could argue that the discount rate used in PV calculations should at least be on the same level as the inflation

Table 3. Net present value of Costa Rica swap cash flow, calculated at a 25% discount rate (million US $)

End of Year	Investment	Revenue Interest	Revenue Principal	Total Revenue R_t	Discount factor $(1+i)^{-t}$	Present Value PV
0	-0.90	0.00	0.00	-0.90	1.00	-0.90
1	0.00	1.01	0.00	1.01	0.80	0.81
2	0.00	1.01	0.00	1.01	0.64	0.65
3	0.00	1.01	0.00	1.01	0.51	0.52
4	0.00	1.01	1.01	2.02	0.41	0.83
5	0.00	0.76	1.01	1.77	0.33	0.58
6	0.00	0.51	1.01	1.52	0.26	0.40
7	0.00	0.25	1.01	1.26	0.21	0.26
					sum	3.14

27. Transaction costs can be included in the calculation by simply subtracting them from the present value.

rate. Figure 4 illustrates how the swap's present value changes with the discount rate[28]. At a 5% discount rate the present value would be US $6.93 million, at a 35% discount rate only US $2.22 million. No one knows today, of course, what inflation rate Costa Rica will face in the future, but Figure 4 illustrates the difficulty in safeguarding the value of swap proceeds in a situation where the bond's interest rate is non-negotiable and the inflation rate is high, which could be the case in Costa Rica.

The Costa Rican Central Bank approved in 1989 that US $15 million of its debt per year (for three years) be exchanged for conservation, micro-enterprises programmes and education (Umaña Quesada 1989). The investor can, under this programme, choose between US dollar denominated 20 year-bonds with 3% interest, exchanged at 80% of the face value, or local currency bonds with 8% interest at 100% face value.

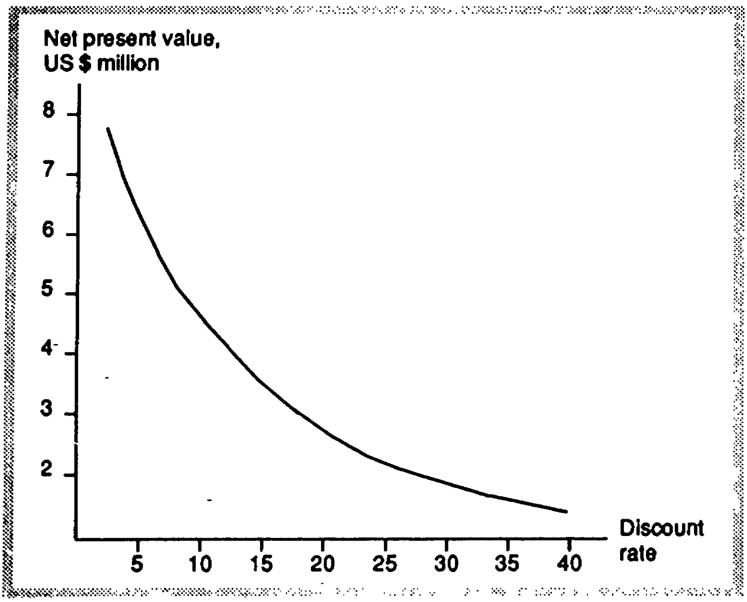


Figure 4: Net Present Value of Cash Flow at Different Discount Rates, 1987 Costa Rica Swap.

28. Other factors, such as the risk that future government administrators not will stick to the agreement, or the acute need for management investment capital, might justify even higher discount rates favouring payments in the near future.

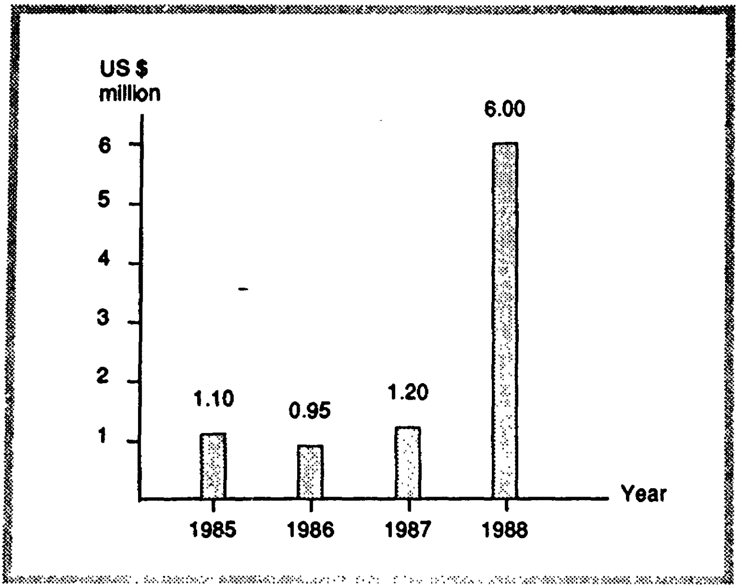


Figure 5: Foreign Donations to Protected Area Projects in Costa Rica 1985-88.
Source: Page D. 1989.

Costa Rica signed a US $10.8 million deal in March 1990, under this new programme, where US $5 million of debt were exchanged for local currency bonds benefitting La Amistad Biosphere Reserve[29] and US $5.8 million in US dollar bonds for the National Biodiversity Institute (Janzen 1990). It is, of course, too early to make any evaluation of this programme, but one might conclude that the proceeds are not safeguarded against inflation and, furthermore, the interest rates seem in this context to be rather low (8% and 3% respectively).

The above discussion has focused on the financial aspects from the investors point of view, but are the agreements good for Costa Rica? One important factor that has to be considered in trying to answer this question is the exchanges' multiplier effect on foreign donations to protected area projects in the country. Figure 5 shows the amount of foreign donations to Costa Rica for the purpose of protected area management in

29. The exchange proceeds wil be used for compensating land owners who moved out from the park when it was created, and for management expenditures.

1985-88. In 1988, one year after the 1987 debt exchange programme was initiated, Costa Rica received five times more donations than in 1987. It is possible that this increase can to a certain extent be explained by the swap agreement.

Perhaps Costa Rica's most obvious benefit from these exchanges, however, is to safeguard the production of future environmental goods and services in La Amistad Biosphere Reserve (e.g. biological diversity and watershed protection). It has been calculated that the reserve includes watersheds with a hydroelectric potential of over 50% of the nation's total future hydroelectric production. If catchment areas within the reserve are not protected from intensive logging, reservoirs built downstream will rapidly silt up, entailing expensive dredging costs or even rendering them useless.

Ecuador: Galapagos and Yasuni Biosphere Reserves

Background to the agreement

Fundación Natura, Ecuador's largest non-governmental conservation organization, negotiated directly with Ecuador's government on a debt-for-nature programme that was signed in October 1987. The agreement states that Fundación Natura has the right to redeem commercial debt up to a maximum of US $10 million, at 100% face value for non-negotiable local currency (Sucres) monetary stabilization bonds. The interest payable on the bonds equals the market interest rate, minus an 8% tax on the dividend, and is adjusted every six months[30].

In order to fund the programme, Fundación Natura reached a debt-for-nature co-operation agreement with the World Wildlife Fund-US in December 1987. WWF-US and the Foundation had already worked together for a long time, and WWF-US were interested in providing continued, additional, financial support to Fundación Natura (later on The Nature Conservancy signed a similar agreement with Fundación Natura). The first part of the debt exchange programme was finalized in March 1988, when WWF-US arranged for the purchase of one million dollars

30. The interest is linked to the average interest paid by Ecuador's five largest banks.

of commercial debt (paying 35 cents on the dollar) in exchange for monetary stabilization bonds[31]. The bonds were then given to Fundación Natura, which was also entitled to receive all interest and principal payments on the bonds. The interest is paid every six months, and 1/8 of the principal is amortized per year for eight years. Fundación Natura gained a 33% net interest income (41% interest - 8% tax) during the first year[32].

The second exchange, which completed the programme, was made in April 1989, by The Nature Conservancy (which signed a debt-for-nature agreement with the Fundación Natura and the Monetary Board of the Ecuador Government in March 1989) and the World Wildlife Fund-US. The Nature Conservancy bought US $ 3.6 million using the American Express Bank, including US $ 400,000 on behalf of the Missouri Botanical Gardens. The World Wildlife Fund-US bought US $ 5.4 million through Bankers Trust and Morgan Guaranty Trust. The second hand debt market price had dropped to 12 cents on the dollar. The debts were exchanged for monetary stabilization bonds which will mature in eight years. Fundación Natura receive interest payments every six months, starting February 1990 (the same interest rate is applied as on the first bonds). Fundación Natura will receive the principal (amortization of 1/7 of the principal per year), as an endowment fund for its general activities.

The income from the bonds now supports several conservation projects, such as the development of management plans, environmental education, establishment of a Conservation Data Center providing inventories of threatened fauna and flora communities, and various endangered species programmes, in several protected areas, including the Galapagos and Yasuni Biosphere Reserves[33].

31. As the government used the official exchange rate in the conversion of the debt in US dollars for bonds in sucres (249 Sucres per US $), which was less than the floating exchange rate, the redemption price averaged 16% less than the face value of the debt.
32. The interest income, 82.8 million sucres, was equal to Ecuador's total National Parks budget.
33. Five priority areas, besides Yasuni and Galapagos Biosphere Reserves, were stated in the swap agreements: Cayambe-Coca Ecological Reserve, Cotacachi-Cayapas Ecological Reserve, Sangay National Park, Podocarpus National Park, and Cuyabeno Wildlife Reserve.

Marine iguanas at Narborough, Galapagos Islands, Ecuador.
© Unesco/IUCN/Eibl-Eibesfeldt.

45-752 - 91 - 4

Galapagos Biosphere Reserve

The interest income generated from approximately US $3 million of local currency bonds will be allocated directly to conservation activities within the Galapagos Biosphere Reserve, under the auspices of the Charles Darwin Foundation (which later will eventually receive the principal from the bonds dedicated to this programme), the Direccion Nacional Forestal, and Fundación Natura. The Galapagos Biosphere Reserve has experienced increased pressure from (non-authorized) tourism and human immigration for several years. It will now be economically feasible to try to keep the number of tourists down to an ecologically sustainable level, without threatening the management of other protected areas which receive important financial support from the surplus tourism income generated by Galapagos.

Because of the debt-for-nature agreement, these areas can now rely upon financial support from Fundación Natura to a much larger extent than before[34]. The Charles Darwin Foundation can, therefore, afford to implement a management plan, including the necessary patrolling of the islands' off-shore marine areas.

Yasuni Biosphere Reserve

The Nature Conservancy decided to allocate 26.6% of its debt-for-nature proceeds to Fundación Natura for the protection of four parks, including Yasuni Biosphere Reserve. The general objective was to support ongoing and future conservation and development programmes that aim to change the present status of these valuable but poorly managed "paper parks" (i.e. parks and reserves that are more or less unprotected) into conservation areas where biological and other resources are effectively managed.

In the case of Yasuni Biosphere Reserve, there are several environmental threats which will create large damage unless they are controlled. The most alarming is petroleum development (The Nature Conservancy, 1990b). The Ecuadorian government is informed on the risks involved but cannot be expected to afford not exploring the area's commercially valuable oil deposits. Although the government might be willing to use the most environmentally sound techniques available, thereby minimizing direct damages to the reserve, the real problem, is the indirect damage created by roads that will have to be built to service pipelines

34. Because only the Galapagos Islands National Park has generated positive net income, it alone funded the management of twelve other parks in the country.

and other installations, opening up the area for colonization and large-scale deforestation. The Reserve therefore needs considerable management resources, and carefully defined management plans, to ensure that these indirect effects on the environment and on the indigenous groups that traditionally frequent the Reserve, are minimized. Conflicting interests meant that the approval of the Yasuni management plan was delayed.

The Ecuadorian National Forestry Directorate provides funding for a park director and a park ranger. The size of the area and the various management challenges it faces, has led The Nature Conservancy to suggests, however, that a significant number of additional park personnel (a park administrator, technicians and rangers) be hired and trained. Construction of a new guard station has also been recommended. The park administration is furthermore in urgent need of field, transport, and office equipment. The swap proceeds have and will be used primarily for these purposes.

Economic viability of the debt exchange agreements

The extent to which the above tasks may be carried out over the entire time-span of the Galapagos and Yasuni programmes depends, of course, to a large degree on how the real value of the exchange proceeds will evolve during the period. There has been justified concern that the value of the interest income will be severely eroded by inflation. While consumer prices might rise from day to day, the interest payable on the bonds is adjusted only every six months. Ecuador's average annual inflation between 1980-87 was 29.5% (World Bank, 1989) but it had increased to 90% in July 1989 (Tarqüinio, 1990). This means that, if the relation between the interest rate (35% in July 1989) and the inflation rate will not be improved, the bonds will be totally devalued in a few years.

In addition, the value of the local currency (in US $) is today much lower than when the agreement were signed, making investments in foreign goods and services needed in the projects more expensive. Although Fundación Natura attempt to make all capital investments (vehicles etc.), planned under the programme as early as possible, and despite the fact that surplus money (i.e. money received but not immediately invested) may be placed in short-term financial instruments (but not abroad or in foreign currencies) that can be expected to follow inflation, this will result in reduced total economic value of the programme.

Furthermore, it undermines the possibility for long-term management planning (unless capital from other sources is guaranteed[35]), which otherwise would have been an important benefit from the exchange.

35. The government of Ecuador established a new swap programme in October, 1989, for cultural, social as well as environmental projects. The total amount of debt that may be swapped is US $50 million, and each investor may swap up to US $ 5 million (Junta Monetaria, Secretaria General, 1989).

DEBT-FOR-NATURE GUIDELINES

As already indicated, the process of reaching a debt exchange agreement is a complex one. The debt-for-nature mechanism is a new and developing instrument and each bargaining process is also unique. The following guidelines, which draw mainly on information accumulated in connection with the swaps examined in this digest, have, therefore, been kept deliberately general and have been based on the assumption that all parties can benefit from such exchanges.

The debt conversion process includes extensive negotiations, the outcome of which might favour some players more than others. In many bargaining processes it is often a good tactic, however, not to try to 'win' a negotiation by making the other side a plain loser. Such agreements could turn out to be Pyrrhic victories, making it impossible for the 'winner' to co-operate with the 'loser' and to discuss future agreements. The first guideline, which could be considered by all players, would be not to forget that it should also be possible to work together after the deal has been signed.

The debtor government

Establish debt-for-nature exchange programmes. Established programmes are a signal to the investor indicating that the debtor country really is interested in debt exchanges and that tax-accounting and other regulatory obstacles to debt exchange programmes have been dealt with. They provide important information on areas that the government makes eligible for exchanges, reduce uncertainty and serve to keep negotiation and transaction costs at a reasonable level. The investment menu outlined in the programme should also be open for negotiations. Broad menus (including conservation, sustainable development programmes, training, education, etc.) will attract more investors and donors than programmes with few options.

Try to keep track of who owns the country's debts. No clearing-house exists that registers transactions in the second-hand debt market. Such information can, therefore, save time and money the day the debt is needed in debt-for-nature transactions or in debt buy-backs.

Support and, if necessary, strengthen local management authorities. These institutions are vital partners who often are given the responsibility for the swap proceeds. They function as a guarantee for donors and conservation investors that the exchange proceeds will be managed efficiently and according to the agreement. The process towards reaching an exchange deal will take much longer without these institutions, and their absence may keep interested investors away from exchange discussions. Good relations with existing national management bodies are also of interest to the government since these organizations often will receive large foreign support through the exchange and, therefore, become more influential.

Inform the central bank on the debt-for-nature concept. The support of national institutions, like the central bank, is vital as they will play an active role in the preparation of debt-for-nature programmes and other debt exchange negotiations. The benefits a debtor country can acquire from debt-for-nature agreements are partly of a non-monetary character (e.g. improved environmental quality, conservation of biological diversity). The exchange might therefore not be appreciated at its 'true' value by the central bank and other official bodies which concentrate on traditional economic indicators. It is important that the central bank is informed at a early stage about the value of such programmes so as to overcome this (pedagogic) obstacle, which could result in the central bank opposing an exchange.

Include representatives of local residents and interest groups in the debt-for-nature planning process. The exchange process revolves around complicated financial trades in which local communities might have little experience. A debt-for-nature operation could, therefore, easily become a top-down exercise excluding local people from decision-making. It is also possible that local needs are perceived as being less important in situations where large debt reduction benefits are at stake. Others may believe that taking local (perhaps competing) socio-economic demands into consideration will only complicate and delay the deal. However, the active participation of local people in the planning process is the best guarantee that agreements are reached that meet the approval, and win the support, of local groups. If not, future conflicts could severely erode the benefits gained. The Bolivian debt exchange (see pages 29-35) exemplifies this point.

Inform the public and the media on the functioning of debt-for-nature exchanges, including the sovereignty issue. Debt-for-nature transactions can be complicated and are not always very transparent. Agreements may therefore be misunderstood. The Bolivian case shows that a transaction can easily be perceived as including elements of 'environmental imperialism', by giving the public the impression that land or other national resources are being transferred to foreign interests. Such misinterpretations will, of course, reduce the debt exchange potential. Governments, together with national NGOs have, therefore, an important educational function to fulfill by informing the media and the public on debt-for-nature exchanges, including the question of sovereignty.

Minimize inflationary risks. Small debt exchange volumes will only have insignificant inflationary effects. Large volumes, however, could have a bigger effect on the inflation rate. One way to reduce this would be through issuing long-term bonds. Only if the government prints new bonds will inflation be a problem, since an allocation of already existing domestic monetary resources towards the environmental sector will not produce inflationary effects greater than what could be expected if the same amount of money were spent on other programmes.

The conservation investor

Create good working relations with banks and other financial institutions. Good connections with the finance community will prove vital in the search for the 'right debt, at the right quantity, and at the right price'. Economic advisers can also prove to be important partners in debt negotiations with the debtor country. Organizations and institutions responsible for financing environmental programmes in developing countries face various difficulties which often require professional money management consultations. Increased capital flows to these groups for environment investments is an additional argument in favour of solid connections with the finance sector.

Initiate debt-for-nature exchange discussions as a part of regular management consultations with governments. Because the process to reach any debt exchange agreement is time-consuming, both players should provide information on possible areas of agreement before any serious negotiations take place. Such information could also be an important factor in taking advantage of temporary 'bargains' in the second-hand debt market.

Calculate and compare net present values for different debt exchange agreement proposals and other types of financing arrangements. Environmental projects can be financed in various ways. Debt exchanges are only one tool, and their benefits and constraints should always be compared with those of other available funding arrangements. Large debt exchange discounts, for example, are no guarantee that the debt exchange mechanism will produce the most economically favourable result. Net present value calculations are a useful indicator in the evaluation of different funding alternatives.

Try to design deals that safeguard the real value of exchange proceeds. Inflation can severely reduce the value of the swap proceeds unless they are protected from price rises. Try to get agreements that safeguard the real value of the exchange revenue. Foreign currency exchange changes may also dilute the exchange value. It is, therefore, a good idea to try to reach agreements which make it possible to place the swap proceeds in bonds yielding foreign currency, especially if the project entails large disbursement in hard currency.

Consider potential resource use conflicts carefully and safeguard the rights and needs of local people. There is a great risk that debt exchange agreements, that are reached without sufficient consultation with local people and without examination of local resource use patterns and conflicts, will be unsuccessful. Try, therefore, to make the operation a 'bottom-up' exercise by using the experience of local groups at an early phase in the planning process. They should also be given the chance to express their opinion regarding how the exchange proceeds should be used and administered.

Develop working relationships with local partners. Local NGOs are not only important discussion partners for the involvement of local communities, they may also help explain the benefits of debt-for-nature exchanges to suspicious debtor governments and to the media. NGOs also play a significant and responsible role in carrying out debt-for-nature agreements. The conservation investor should, therefore, make sure to establish good relations with local NGOs and institutions. If necessary, strengthen weak organizations, or even help in establishing new organizations in countries where such institutions are absent.

Try to co-ordinate exchanges with other debt-for-nature investors. Co-operation with other investors could reduce the transaction costs involved in reaching an agreement. The possibility for achieving larger debt reductions, due to investor co-operation, could perhaps also increase the interest of debtor countries in debt exchanges.

Do not forget the purpose of the exchange. The goal is not to accomplish a sophisticated financial deal, but to protect the environment, to conserve genetic diversity, to promote sustainable development, etc. It is possible that the complicated, time-consuming, negotiation process, can prevent the investor from paying enough attention to the transaction's goal, i.e. how the money will be used (including the examination of local resource use issues). Unless this hazard is recognized and avoided, it is possible that the investor will reach agreements that are poorly prepared and might result in failures.

Work with a long term perspective. It takes a long time to reach a debt exchange agreement. Deals often build on a long and mutual working relationship between the actors. Debt transactions should, therefore, not be seen as a speedy mechanism for temporary programme expenditures. Otherwise, the risk is too large that money will be lost on negotiations that never had a chance to be successful.

The creditor bank

Initiate discussions with potentially interested debt exchange investors. Be active, take the first step and inform potential conservation investors on the financial aspects of debt exchanges. Such initiative could lead to new business opportunities, including the chance of selling non-performing debt.

Inform shareholders on the benefits of debt-for-nature swaps. It is not logical, from the shareholder's perspective, that the bank sells its loans at a loss to a conservation investor who then makes a debt exchange investment profit. The bank should, therefore, inform shareholders on the potential benefits the bank can get from selling non-performing debts, at a loss, for the purpose of sustainable development and environmental programmes, including the scope for improved relations with the debtor country and with the increasingly important environmental sector.

Examine the possibility of combining debt-equity negotiations with debt-for-nature deals. Industries interested in transfers of environmentally sound technologies through debt-equity swaps, could co-operate with debt-for-nature investors in large debt conversion programmes. A dynamic bank could act as a catalyst and co-ordinator of such programmes, and possibly be able to dispose of larger quantities of non-performing debt.

Try to maximize the debt portfolio's debt-for-nature exchange potential. The bank could try to obtain debt that could be expected to be of high interest for exchange investors, through debt-debt exchanges.

Co-operate with other banks. Co-operation with other banks holding non-performing debt could minimize the risks of competing banks acting as free-riders, and of increased moral hazard reducing the debt service discipline among debtor countries.

Consider adopting a green-policy based on an assessment of the environmental impacts of bank policy. One consequence of the growing public concern for the environment is that an increasing number of people are interested in how their savings are invested. Green-Funds, which make available savings to work for, not against, the environment, are becoming increasingly popular (Shea, 1990). It might thus be a good idea if the bank made an environmental impact assessment of its investments and considered adopting a green-policy, which could give the bank a comparative advantage in the future. A green-policy could also see that non-performing debts are donated to conservation investors for the purpose of debt-for-nature exchanges.

Table 4 summarizes the guidelines presented above.

TABLE 4. Summary of debt-for-nature guidelines for the debtor country, the conservation investor and the creditor bank

Debtor Government

- Establish debt-for-nature exchange programmes.
- Try to keep track of who owns the country's debts.
- Support local management authorities.
- Inform the central bank on the debt-for-nature concept.
- Include representatives of local residents and interest groups in the planning process.
- Inform the public on the functioning of debt-for-nature exchanges, including the sovereignty issue.
- Minimize inflationary risks.

Conservation Investor

- Build good working relations with banks and financial institutions.
- Initiate debt-for-nature exchange discussions as part of regular management consultations with governments.
- Calculate and compare net present values for different financing arrangements.
- Try to safeguard the real value of swap proceeds.
- Consider potential resource use conflicts carefully, and safeguard the rights and needs of local people.
- Develop working relationships with local partners.
- Co-ordinate programmes with those of other debt-for-nature investors.
- Do not forget the purpose of the exchange.
- Work with a long-term perspective.

Creditor Bank

- Initiate discussions with potentially interested debt exchange investors.
- Inform shareholders on benefits from debt-for-nature swaps.
- Investigate the possibility of combining debt-equity negotiations with debt-for-nature exchanges.
- Try to maximize the debt portfolio's debt-for-nature exchange potential.
- Co-operate with other banks so as to minimize the risks of competing banks acting as free-riders, and of increased moral hazard reducing the debt service discipline.
- Consider adopting a green-policy, including making an assessment of the bank's credit's environmental impacts.

Source: Dogsé 1990.

THE POTENTIAL OF DEBT-FOR-NATURE EXCHANGES

The worsening environmental crisis, and the continuing debt crisis, provide considerable opportunities for various debt-for-nature enterprises. Several institutional and political events also indicate that large-scale debt conversion for environment and development now may be realized.

The first part of this chapter lists some of these events. The second part examines region specific factors influencing the exchange potential. The chapter ends with a discussion around the premise that although the present situation favours debt-for-nature programmes the time available might be quite limited.

Economic, political and institutional events and developments

- Prices of Third World debts have fallen dramatically in the second-hand debt market (see Table 5), activating old and new investors as the potential for larger exchange discounts increases.

- Tax payers in developed countries are becoming increasingly aware of the need for (additional) capital transfers to developing countries for reducing existing and potential ecological hazards (e.g. loss of biological diversity, deforestation, ozone layer depletion, and global warming) and are, therefore, increasing the pressure on politicians and other decision makers to take appropriate action.

• The World Bank has published a policy paper concerning debt-for-nature swaps (World Bank 1990a). Although the Bank is still not prepared to directly finance such exchanges, it stress that "The objectives of debt-for-nature transactions are consonant with the Bank's expanding involvement in, and support for, increasing environmental activities and reducing debt burdens" (World Bank 1990b, p. 79). The Bank outlines several ways in which it may support debt-for-nature exchanges, these include:

(a) Working with governments through policy dialogue and economic and sector analysis to create macroeconomic environmental-and possibly regulatory-frameworks that would facilitate these transactions;

(b) Helping to mobilize resources for debt-for-nature transactions where they are a part of a larger programme of environmental action or debt reduction in which the Bank has been involved;

(c) Providing information to governments on potential debt-for-nature opportunities and possibly bringing together interested governments, commercial banks and NGOs; and

(c) Providing lending operations co-ordinated or co-financed with debt-for-nature transactions that would improve the effectiveness or sustainability of environmental actions; for adjustment loans with environmental components, a portion of such loans may be set aside for debt service reduction within the guidelines of such operations (World Bank 1990b, p. 79).

• The World Bank has proposed that a Global Environmental Facility be set up to finance environmental programmes in developing countries. The Facility would primarily allocate resources for reduction of greenhouse gas emissions, ozone layer protection, and protection of biodiversity and international water resources (Brundtland Bulletin, No. 8, June 1990, p. 29). It is possible to imagine that the swap tool could be useful for carrying out these tasks.

• The G-7 countries (Canada, France, Federal Republic of Germany, Italy, Japan, United Kingdom, United States) meeting in Paris in 1989, concluded that debt-for-nature swaps would be supported in special cases. The G-7 governments have also decided to review tax-accounting and regulatory obstacles to debt-reduction settlements.

• President Bush has proposed that environmental trusts be created into which interest payments on US loans can be disbursed (see below). This may attract debtors who mainly service the interest on their debts (as opposed to the principal), and therefore have been uninterested to enter debt conversion discussions regarding swapping the principal. Furthermore, the proposal constitutes an important supplement to the so-called Brady Plan[36] which only deals with commercial debt.

• The First European Conference on Debt and Conservation[37], held in Zurich in November 1989, which focused on debt-for-nature exchanges,

TABLE 5. Prices of Third World debts in the second-hand debt market

(percentage of nominal value)

Country	Jan 1987	Jan 1989	Dec 1989
Argentina	65-67	18	12-13
Brazil	75-76	34-35	22.5-23.5
Chile	67-69	60-61	60-60.5
Ecuador	65-66	13	14-15
Mexico	56-57	37-38	37-38
Nigeria	36-42	23-24	30-31
Peru	18-20	4-6	5-6
Philippines	72-75	44-45	50-51
Poland	42-44	34-35	15-17
Venezuela	74-75	37-38	34-35

Source: SWAPS. The newsletter of new financial instruments. Vol. 4. No. March 1990

36. Named after US Treasury Secretary Nicholas Brady, the Brady Plan emphasizes the need for debt reductions as a major instrument for the recovery of the economies of the most indebted and poorest countries. Its guidelines are directed only towards commercial debt and provide the creditor with three main (voluntary) options: 1. forgive part of debt in exchange for the debtors commitment to service the remaining volume. 2. reduce the sum of the interest payments by lowering the interest rate. 3. give new credits with better terms for the debtor than the old debt (which then could be used to service the old debt). Mexico was the first country to reach a debt reduction agreement in the spirit of the Brady Plan (Cline, 1989).
37. The First European Conference on Debt and Conservation was organized by: WWF-International; Environmental Studies Program, Dartmouth College, N.H., U.S.A.; and the Human Ecology Group, Swiss Federal Institute of Technology (ETH) Zurich, Switzerland.

demonstrated that several banks and other financial institutions are now taking these transactions seriously[38] (Wagner 1990, Tammes, 1990).

- Existing debt-for-nature exchanges have shown that the technique, however innovative and experimental, can be made to work (Reilly 1990).

- Broader swap menus. More conservation investors are prepared to discuss debt-for-sustainable development exchanges, going beyond the goal of pure conservation, thereby increasing the probability that the exchange meets the approval of the debtor country.

Regional opportunities and prospects

The following paragraphs examine some factors influencing the potential for debt-for-nature exchanges in different regions of the world.

Latin America and the Caribbean

The first swaps that were made occurred in Latin America, and the scope for future exchange activities using Latin American and Caribbean debt must be considered as large. Already established but not yet executed programmes, as in for example the Dominican Republic and Argentina,

38. The following institutions were among those represented at the conference:
Commercial banks and financial institutions: The Chase Manhattan Bank; Shearman and Sterling; NMB-Bank; Citicorp Investment Bank; Citibank; Union Bank of Switzerland; Credit Suisse; Salomon Brothers; McKinsey & Company; Deutsche Bank AG; Meridien International Bank; Morgan Guaranty Trust Company; Istituto Bancario San Paolo di Torino; Kreditanstalt für Wiederaufbau; ARFINT-Arbitrages Financiers Internationaux; Bankers Trust Company; Bank Mees & Hope; Bank S.G. Warburg-Soditic; First Commercial Bank.
Multinational development banks: International Monetary Fund, IMF; World Bank, IBRD; African Development Bank, ADB; Banque Central America de l'Intégration Economique.
Official finance agencies: Credit Commercial de France; Swedish Export Credits Guarantee Board; Swedish National Debt Office; Federal Office for Foreign Economic Affairs, Switzerland; Federal Ministry for Economic Cooperation, Federal Republic of Germany.
Official donors: Swissaid; Australian Council for Overseas Aid; German Marshall Fund of the United States.

would, if completed, substantially increase the regions debt exchange activities.

Many tropical forests are found in Latin America and their management is of growing international concern because unsustainable forest practices threaten to destroy much of the remaining tropical forest areas in a few decades. An important response to these concerns was the decision taken at the 1990 Economic Summit in Houston to negotiate by 1992 an international convention, under the United Nations auspices, to protect the world's tropical forests. The G-7 leaders also advised the World Bank and the European Community to co-operate with Brazil in the preparation of a pilot plan to curtail deforestation in the Amazon. It is possible that the exchange mechanism will be proposed as one tool for sustainable tropical forest management investments, since the G-7 countries have already expressed their support for debt-for-nature exchanges.

Some countries, e.g. Brazil, have made it clear, however, that they will not enter debt-for-nature discussions, which they see as foreign intervention in national affairs. It remains to be seen whether this policy will be continued by the new Brazilian President, Fernando Collor de Mello, who has initiated various environmental programmes. In addition, Brazil will host the UN Conference on Environment and Development in June 1992, which will focus world attention on Latin America's economic and ecological problems and opportunities.

Several small Latin American and Caribbean countries could, through debt-for-nature arrangements, achieve substantial environmental and economic effects. At the same time, such countries are often least able to take advantage of more conventional debt reduction methods. The emphasis has frequently been on increased export of a few primary commodities (sugar, timber, coffee, etc.). The resulting lack of economic diversification has made it difficult for these countries to adjust to changing international economic conditions. Fluctuating world market prices have resulted in economic instability and often in-reduced debt service ability, as prices on many primary commodities have declined during the 1980s. Dominica, Panama, Jamaica, Haiti, and Costa Rica are some examples of countries belonging to this group. Debt transactions with such countries could very well support management schemes that use a wider range of natural resources, providing local populations with a increased supply of domestic goods and services, while reducing the economic and ecological risks of having to rely on a too limited production base. Costa Rica has already taken advantage of this possibility and several other countries, including Panama, Uruguay and Jamaica, are close to establishing their own debt-for-nature programmes (Brand 1990).

The financial crises in the region call, however, for debt reduction solutions that include solving the problem of bilateral debts[39]. President Bush has presented a plan for dealing with the US contribution to the Latin American debt dilemma (US $12 billion is owed to the United States), thereby addressing the issue of reduction of public debt, which was excluded in the Brady initiative. The plan, which was announced on 27 June 1990, includes, besides proposals of increased flow of investment capital into the region and free-trade zones, two debt-conversion recommendations that focus on the environment.

The first proposal suggests that environmental trusts be created into which interest payments on US loans (restructured, concessional, official bilateral loans) can be disbursed. The second proposition recommends that traditional debt-for-nature swaps should be allowed using a portion of outstanding US bilateral commercial credits under Export-Import Bank and Commodity Credit Corporation programmes (USIS, 1990; *Herald Tribune*, 26 June 1990). The interest put into the trust funds, as well as the proceeds from the debt swaps, would be used to support long-term environment programmes in the region. The fact that some indebted countries have given up servicing the principal while struggling to pay the interest, may make the proposed environmental trust funds especially interesting, as they would allow the debtor country to pay the interest in local currency on funds that would be used for projects in their own country. Other creditor countries might follow, if the Bush plan comes true, increasing the possibility for large-scale bilateral debt conversion programmes.

Soviet Union and central and eastern Europe

Rapid political changes, and the opening up of countries in central and eastern Europe, have revealed serious environmental degradation that

39. The total external debt of 26 Latin American and Caribbean countries, amounts to US $ 400 billion. Out of which more than US $ 300 billion is owed to commercial banks, the rest to governments and multinational credit and development institutions.

requires urgent and immediate action: obsolete and polluting factories will have to be dismantled or rebuilt, rivers and forests rehabilitated, and dumps of toxic wastes cleaned. The costs will be huge. Table 6 provides estimates for some environmental related investments.

TABLE 6. Estimated environmental investment needs in some central and eastern European countries

Country/region	Investment	Cost US$
Eastern Europe[1]	Cleaning up industries	200 billion
Former German Dem. Rep.	Providing relatively clean energy	20 billion
Former German Dem. Rep.	Cleaning up water and air	180 billion (300 W Marks)
Poland	Cleaning up the River Vistula	100 million - 15 billion

1 Former German Democratic Republic, Poland, Czechoslovakia, and the European part of the USSR

Sources Cave 1990, Simons 1990

It seems likely that most countries in the central and eastern Europe, including the USSR, will not be able (at least in the short term) to meet these expenses without substantial external financial help. Due to improved East-West relations and the fact that environmental hazards now are beginning to be analyzed in terms of security threats (Renner 1989, Shabecoff 1990), it might be possible to free military funds for development and environmental investments in this region. There are, however, differences in the extent to which different nations will be able to attract capital from other (neighbouring) countries, the European Economic Community, and other potential creditors, like the European Bank for Reconstruction and Development. Table 7 gives examples on capital transfers for the environment to central and eastern European countries that have already been decided upon.

It is worth noting that the former German Democratic Republic and Poland have been especially successful in attracting foreign capital for environment investments. The development towards a unified Germany helps explain the major support of the Federal Republic of Germany to the former German Democratic Republic[40]. Poland and the former German Democratic Republic also benefit from having rich neighbours, who are concerned about reducing transboundary pollution from the East. It will often be more cost-effective for affected countries in the West to invest in reduction of transboundary pollutants in old factories and

TABLE 7. Environmental aid to Eastern Europe

Receiver	Donor	US $ million	Purpose
Poland	Denmark	70	Energy and environmental projects
Poland	Sweden	60	Environmental projects
Poland	Finland	35	Environmental projects
Poland	European Economic Community	26 8	Environmental projects
Poland / Hungary	United States	40	Environmental projects, including $13 million spent on upgrading of a coal fired power plant
Former German Dem. Rep.	Federal Rep. of Germany	600	Environmental clean-up work
Hungary	European Economic Community	2.4	Development of Environmental Centre for Central and Eastern Europe, in Budapest

Source Cave 1990, Hagerhall 1990

40. The former German Democratic Republic can not only expect to receive extensive financial support from the Federal Republic of Germany, the two governments have also expressed the need for environmental standards to be the same by the year 2000. The Federal Republic's environmental regulations are already (since 1 July, 1990) applicable on all new industries in the former German Democratic Republic (Simons 1990).

industries in the East rather than in their own, relatively 'clean' industries. Hungary, Romania, Yugoslavia and Czechoslovakia have so far been less successful in attracting foreign environmental aid, compared with Poland and the former German Democratic Republic. In addition, the German unification, and the weakened Soviet economy, threaten to reduce import of goods from these four countries and thereby further aggravate their economic difficulties. The debt-for-nature exchange performed in Poland[41], although modest in size, could perhaps show the way for dealing with a part of these nations' environmental expenditures, and act as a catalyst for new-money for the environment and sustainable development projects in this region.

International economic aid has been promised to the Soviet Union, primarily because it is seen as one prerequisite for a successful transition of the USSR economy and for consolidating stability in the region. Although the amounts, terms and aims are not yet explicit, it is likely that the exchange mechanism will be proposed as one instrument through which environmental related investments can be made[42].

Africa

The African debt dilemma has not received as much attention in the media as the Latin American debt. This is primarily because the amounts borrowed by African nations are much smaller and do not endanger the stability of the international banking system. Furthermore, 80% of the African debt is owed to bilateral or multilateral funding agencies, implying that losses on the loans will be distributed over a large number of taxpayers. The impact of the debt on African countries is in many cases, however, even more negative than in heavily indebted countries in other parts of the world (Humphfreys *et al.*, 1989) as illustrated by Table 8

41. The exchange, which was co-ordinated by WWF-Sweden and WWF-International, is intended to finance the establishment and management of a new national park in northeastern Poland (Biebrza National Park). The exchange is part of a larger project aiming at reducing pollution loads into the Vistula River Basin. Sweden is interested in this project particularly because the Vistula River discharges large amounts of pollutants to the Baltic Sea.
42. The USSR is confronted with several costly environmental undertakings e.g. rehabilitation after the 1986 Chernobyl nuclear accident, improved management of Lake Baikal with its unique fauna and flora, and restoration of the Aral Sea

TABLE 8. Indicators of debt burdens, 1987

(US$ billions unless otherwise noted)

Indicator	Highly indebted middle income countries[a]	Low Income Africa[b]	Low Income Asia[c]
Total debt,	527	72	113
official source	28%	77%	68%
Debt-service payments,	56.4	4.2	11.8
official source	33%	68%	56%
Ratio of debt to exports	357%	520%	158%
Ratio of debt to GNP	63%	104%	19%

a. Argentina, Bolivia, Brazil, Chile, Colombia, Costa Rica, Côte d'Ivoire, Ecuador, Jamaica, Mexico, Morocco, Nigeria, Peru, Philippines, Uruguay, Venezuela, and Yugoslavia.
b. Those 34 African countries who have access to the World Bank's soft loan facility, the International Development Association (IDA).
c. Bangladesh, Bhutan, Burma, China, India, Lao PDR, Maldives, Nepal, Pakistan, Sri Lanka, and Vanuatu.

Source: World Bank Debtor Reporting System, in Humphfreyes *et al.* 1989

On average, the debt of low-income African countries is more than five times larger than their annual exports (520%) and equal to their gross national product (104%). Compared with corresponding figures for low-income Asia (158%, 19%), the African situation is quite alarming.

Debt problems in Sub-Saharan Africa are aggravated by several internal and external factors, such as inflexible economies built on export of price sensitive primary products, low export growth rate, falling market shares, import reliant industries, high population growth rate, inadequate policies, and soft bureaucracies. Reduced capital flows to, and investment rates in, Sub-Saharan Africa are major obstacles for a continent confronted with environmental problems (e.g. deforestation, soil erosion, and desertification) which require more or less immediate, large-scale investments.

Sub-Saharan nations, however, have profited from regular as well as more special measures to help reduce their debt problem. These measures include rescheduling of repayments, cancellations of concessional debt, and increased concessional credits (Humphfreys *et al.* 1989). France, Federal Republic of Germany, Netherlands, United Kingdom and the United States belong to the group of creditors that have announced such measures. The US Government decided in June 1989 to write-off some US $1 billion in official development loans of sixteen Sub-Saharan countries, provided that they agree to adopt structural adjustment programmes as suggested by the World Bank and the International Monetary Fund (Feldmann 1989). France has, in principle, decided to write off all its public debt to the least developed African nations, and to reduce the interest rate to 5% on credits given to middle-income Sub-Saharan countries (Pelletier 1990). These debt reductions are in line with the Toronto agreement, which provides public creditors with a menu on how to lower debt service payments[43].

Neither the American nor the French programmes have linked debt reduction with environmental actions. Such agreements would in many cases be both possible and desirable and could provide substantial support for the environment[44]. This has already happened in an agreement between the Federal Republic of Germany and Kenya, where the German government wrote off a DM 850 million loan in exchange for a Kenyan commitment to spend a percentage of this amount (i.e. DM 8.5 million) on restoration of overgrazed land (Swaps, June 1989, page 11). The US Environmental Protection Agency (EPA) Administrator William K. Reilly emphasizes that this option not should be overlooked by creditor governments planning debt reduction programmes;

> "...when forgiving debt, for heaven's sake get something for it. Many developing nations would happily increase their local currency expenditures on reforestation, Park protection, wildlife conservation and pollution control in return for some write down of debt" (Reilly 1990).

Debt-for-nature exchanges using commercial African debts have so far been performed in Madagascar and Zambia (see Annex 2). The outlook for debt-for-nature exchanges is probably good, although only a minor part of Africa's debt is owed to private institutions. What might possibly reduce the potential, however, is the evolution of political events in

43. The 1988 Economic Summit in Toronto adopted a menu consisting of three major options open for creditor governments participating in the Paris Club: a. Partial write-off; b. Longer terms; c. Lower interest rates.
44. African nations which are members of the Communauté Financière Africaine (CFA) need the French Treasury's authorization before entering debt-for-nature exchanges. However, the French government has not argued against countries in the CFA zone exploit the debt conversion instrument (Tammes, 1990).

Eastern and Central Europe. The opening up of the Eastern block has led to increased concern among African leaders that foreign investment, and aid capital, will be directed away from the African continent in favour of Europe and the USSR. Although several Western governments have declared that they will not divert funds away from Africa, there is no guarantee that such promises will be kept. The competition of private capital flows will likely also be harder, and threatens to reduce already marginal private investments in the region even further. It is also possible that environmental problems now coming to light in Eastern Europe might attract the attention of the international environment movement and shift some of its activities from Africa to Europe. One can only speculate on what effects such changes might have for debt exchange activities in Africa.

On the other hand, since debt forgiveness does not necessarily require any new money (it rather consists of the reallocation of an external debtor obligation to an internal commitment), these threats might not be too serious. Furthermore, decreased capital flows to Africa would lead to reduced debt servicing ability, and thereby lower debt prices, as well as to potentially accelerated environmental degradation. These are two factors that would attract conservation investors. It seems reasonable, therefore, to conclude that we can also expect more debt-for-nature exchanges in Africa in the future.

Time horizons

It is important to emphasize that the prevailing situation favouring debt-for-nature exchanges is likely time-limited. Two scenarios that could change the situation might be envisaged.

First, the Brady Plan turns out to be successful, and large-scale debt reductions result in reduced supply of commercial debts in the second-hand debt market. Debtor governments might also be less interested in participating in any debt conversion discussion as they might believe that their debt can be cancelled without any compensation at all. Alternatively, debt prices might rise in the second-hand debt market, if the debtors service the remaining debt, thereby reducing the investors incentive to perform future exchanges;

Second, the Brady Plan fails and the debt crises gets worse, making it impossible for the most indebted countries to service their debts at all. A general (co-ordinated) default could then rapidly make the debts practically valueless, leaving the debt owner without any negotiation potential left.

The time available for making debt-for-nature exchanges might, therefore, be quickly running out. Furthermore, the fact that ongoing deterioration of the environment includes significant irreversible events (e.g. loss of species and genetic diversity) should also be considered in this context. This would be of little importance if the problems of the debt burden, lack of investment capital, and accelerating environmental degradation, are alleviated more efficiently through some other mechanism(s). However, few, if any, means of decreasing these problems, with the same potential of benefitting all actors involved, have so far been suggested. This implies that the international community should perhaps be more active in initiating debt-for-nature co-operation, before its potential has vanished.

DEBT-FOR-BIOSPHERE RESERVE MANAGEMENT INVESTMENT FUND: A PROPOSAL

The debt-for-nature case studies that are presented in this digest indicate that biosphere reserves frequently have been targets for swap capital. There is no evidence that biosphere reserves, in the near future, will lose this function. On the contrary, due to the emphasis of biosphere reserves on sustainable development, they are likely to receive increased financial support (see Annex 1 on the biosphere reserve concept). This is both timely and desirable, given that increased management funds are important for the continued successful implementation of the biosphere reserve concept in many countries.

We therefore end this digest by outlining a proposal for the establishment of a debt-for-biosphere reserve management investment fund, which could be administered by the Unesco MAB Secretariat.

Objective

The Fund's general objectives would include:

- Finance establishment of biosphere reserves;
- Attract additional financial resources for biosphere reserve management;
- Facilitate debt-for-nature exchanges in biosphere reserves;

- Collecting and communicating experiences in debt-for-nature exchanges;
- Strengthen regional and intra-regional biosphere reserve networks;
- Encourage dialogue between donors, banks, governments, and environmental organizations on sustainable development financing.

The fund would not only be open for capital going into traditional conservation projects, but for a wide range of activities in connection with a reserve. New reserves are being set up in several countries, requiring capital for planning and implementation. Among the possible activities that could be supported in core, buffer, and transition areas, in already established reserves, mention might be made of scientific and socio-economic research, agroforestry projects, natural history oriented tourism development, transfer of sustainable technology (such as renewable energy equipment), training, infrastructure improvements, institution building, micro-enterprise development, health care, and population programmes. Such debt exchange diversification is now frequently recommended by both donors, investors, as well as debtor governments.

It is not the objective of this digest, however, to provide detailed information on specific projects that would be eligible for fund support, as the negotiation character of the debt-for-nature exchanges process makes elaborate discussion on potential future programme activities somewhat intricate.

Organization

The MAB Secretariat could function as a co-ordinator for debt-for-management investment negotiations and for directing capital into biosphere reserve management projects identified by interested governments, MAB National Committees and local NGOs in different parts of the world (see Figure 6). Close links could be established with the finance sector, as debt exchange transactions are too complicated to be managed successfully without professional finance partners. More detailed organizational design is a matter for further negotiation and consultation among the parties concerned.

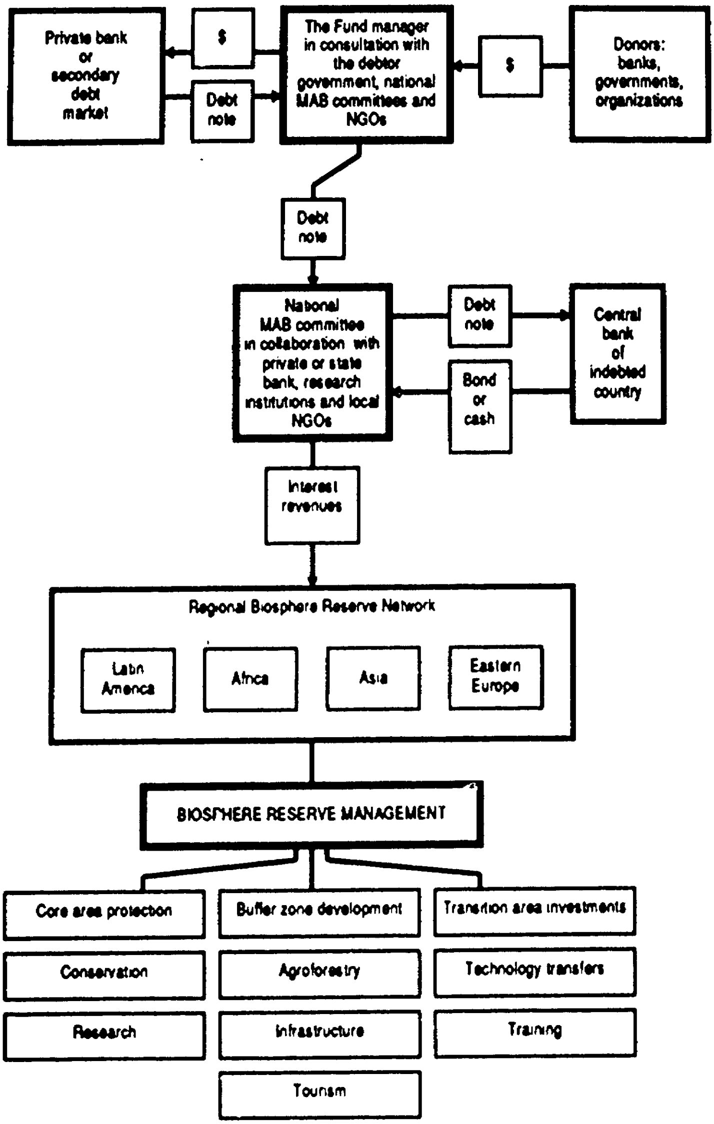


Figure 6: The functioning of an International Debt-for-Biosphere Reserve Management Investment Fund

Co-operation

It is also envisaged that the fund could be used in debt exchange programmes initiated by other conservation investors in cases where the objective of such programmes converges with those of MAB. Voluntary debt-for-nature investor co-operation may be interesting since it can reduce the transactions costs, and allows investors to share comparative organizational advantages and institutional capacities as well as contacts established with debtor governments.

Execution of large swap programmes will, due to the amount of capital needed to undertake such investments, and due to the fact that debtor governments may prefer to endorse programmes with broad swap menus, in fact require that several investors co-operate in pooling arrangements. Debtor governments may also restrict the amount any single investor may exchange within a given swap programme (which is the case in Ecuador's US $50 million swap programme where each investor may exchange up to US $5 million) so as to ensure diversity in investments and to minimize the risk of inefficient spending of swap proceeds on activities where local executing agencies may be inadequate. Sovereignty considerations may also call for multi-investor programmes.

Co-ordination in programme planning and implementation may furthermore amplify the positive effects produced by the programmes in the debtor country. It is possible that the swap mechanism may provide, through its negotiation process, the debtor government with a stronger programme co-ordination position than what traditionally might be the case. For these reasons it is foreseen that the MAB debt exchange fund might rather actively seek partners in debt exchange co-operation.

Financing

The fund would finance its activities using regular MAB sources as well as inputs and contributions from external sources. These could include bilateral and multilateral specialized agencies, development banks, private donors, and commercial banks.

References

Barton, C. 1989. Con: swaps are counterproductive. *Development Forum* 12:2. United Nations Department of Public Information, New York.

Brand, M. 1990. Debt for nature swaps: moving from peril to promise. Manuscript. August 1990. US Agency for International Development, Washington D.C.

Brooke, J. 1989. Peruvian farmers razing rain forest to sow drug crops. *New York Times*. 13 August 1989.

Cave, S. 1990. Cleaning up Eastern Europe. *Our Planet* 2 (2):4-7.

Center for Our Common Future. 1990. *Brundtland Bulletin* 8:29. Center for Our Common Future, Geneva.

Chiang, A. 1984. *Fundamental Methods of Mathematical Economics*. Third Edition. McGraw-Hill Book Company, New York.

Christian, S. 1989. Bolivia to seek anti-cocaine money. *New York Times*. 13 August 1989.

Cline, W. 1989. The Baker Plan and Brady Reformulation: An evaluation. In: I. Husain & I. Diwan (Eds), *Dealing with the Debt Crisis. A Word Bank Symposum*, 176-193. World Bank, Washington, D.C.

Cody, B. 1988. *Debt-For-Nature Swaps: A Brief Overview*. Congressional Research Service Report for Congress. 12 July 1988. Library of Congress, Washington, D.C.

Colleu, M. 1989. Bolivia blazes trail... to where? *Christian Science Monitor*. 10 July 1989.

Conservation International. 1987. Bolivia sets precedent with first ever "debt for nature" swap. *Conservation International News*. D.C. 13 July 1987. Conservation International, Washington,

Conservation International. 1989. *The Debt-For-Nature Exchange, A Tool for International Conservation*. Conservation International, Washington, D.C.

Conservation International. 1990. *Debt-For-Nature Agreements between Conservation International and the Republic of Madagascar.* Fact Sheet. May 1990. Conservation International, Washington D.C.

Debt-for-Development Coalition. 1990. *A Guide to Debt for Development. Making the International Debt Crisis Work for Development.* Revised Edition. February 1990. Debt-for-Development Coalition, US Overseas Cooperative Development Committee, Volunteers in Overseas Cooperative Assistance, Washington, D.C.

Dogsé, P. 1990. Investments in sustainable development: An analysis of debt conversion arrangements. Manuscript. Department of Economics, University of Stockholm, Stockhom.

Economist. 1988. Thirst quencher. *Economist.* 24 December 1988.

Economist. 1989. Brady's Fading Plan. Luring back flight capital is better than asking bankers to pour new money after old. *Economist.* 12 August 1989.

Ecuador. Junta Monetaria, Secretaria General. 1989. La Junta Monetaria del Ecuador. Memo No. 637-89. Quito, 31 October 1989. Junta Monetaria, Quito

Feldmann, L. 1989. Bush announces plan to forgive Sub-Saharan Africa's debt. *Christian Science Monitor.* 10 July 1989.

Ghazl, P. 1990. Amazon Indians join long march to save homelands. *Observer.* 19 August 1990.

Hagerhall, B. 1990. Saving the Baltic: a race against mankind. *Our Planet* 2 (2):8-10.

Hansen, S. 1988. *Debt for Nature Swaps: Overview and Discussion of Key Issues.* Environment Department Working Paper. World Bank, Washington,-D.C.

Herald Tribune. 1990. Latin Trade Zone proposed by Bush. *International Herald Tribune.* 26 June 1990.

Huizinga, H. 1989. The commercial bank claims on developing countries: how have banks been affected? In: I. Husain & I. Diwan (Eds), *Dealing with the Debt Crisis. A World Bank Symposium,* 129-143. World Bank, Washington,-D.C.

Humphfreys, C. & Underwood, J. 1989. The external debt difficulties of low income Africa. In: H. Ishrat & I. Diwan (Eds), *Dealing with the Debt Crisis. A World Bank Symposium,* 45-68. World Bank, Washington, D.C.

Janzen, D. 1990. Report on the $10.8 million debt purchase by the FPN for URC Amistad and INBio completed in March 1990. Manuscript. 26 March 1990. Instituto Nacional de Biodiversidad, San José.

Lagniappe Letter. 1989. Special report: Debt-equity swapping. *The Lagniappe Letter.* 22 September 1989.

Lamp, W. 1988. A tax blueprint for LDC debt swaps. *Tax Notes.* 6 June 1988.

Lovejoy, T. 1984. Aid debtor nation's ecology. *New York Times.* 4 October 1984.

Nature Conservancy. 1989. Debt-for-nature agreement between Nature Conservancy and Fundación Natura. 22 March 1989. Nature Conservancy, Arlington, Virginia.

Nature Conservancy. 1990a. Largest debt-for-nature program announced in Dominican Republic. *Nature Conservancy News*. 2 March, 1990. Nature Conservancy, Arlington, Virginia.

Nature Conservancy. 1990b. *Parks in Peril*. Nature Conservancy, Arlington, Virginia.

New York Times. 1990. Agreement to preserve environment provides help for Madagascar. *New York Times*. C4. 28 August 1990.

Orme, W. The greening of Latin debt. *Latin Finance* 16, April 1990: 52-53, 56-58.

Page, D. 1989. Debt for nature in Latin America: A status report. Manuscript. May 1989. World Resources Institute, Washington, D.C.

Pearce, F. 1990a. Exchanging changes. *Guardian*. 13 April 1990.

Pearce, F. 1990b. Bolivian Indians march to save their homeland. *New Scientist*. 25 August 1990.

Pelletier, J. 1990. Comment aider l'Afrique? *Le Figaro*. 4 July 1990.

Reilly, W.K. 1990. Debt-for-nature swaps: The time has come. *International Environmental Affairs* 2:134-139.

Renner, M. 1989. *National Security: the Economic and Environmental Dimensions*. Worldwatch Paper 89. Worldwatch Institute, Washington, D.C.

Rocha, J. 1990. Voice of the wilderness. *Guardian*. 3 August 1990.

Shabecoff, P. 1990. Security shift to ecology seen: world environment is source of conflict. *International Herald Tribune*. 30 June - 1 July 1990.

Shea, C.P. 1990. Environmental investing. *World Watch* 3(1): 8-9.

Simons, M. 1990. Bonn to clean up East environment. *International Herald Tribune*. 28 June 1990.

Swaps: Newsletter of New Financial Instruments. 1988. Debt for nature: The second year. *Swaps* 2(1): 1-10. Intrados Group, Washington, D.C.

Tammes, G. 1990. Debt-for-nature conversion: what limits their further growth? *International Environmental Affairs* 2(2): 153-159.

Tarquinio, T. 1990. *L'échange dette-nature*. Institute pour une Politique Européenne de l'Environnment, Paris.

Umaña Quesada, A. 1989. Debt relief for energy efficiency, conservation and sustainability. A proposal presented by Dr. Alvaro Umaña Quesada, Minister of Natural Resources, Energy and Mines for Costa Rica. May 1989. World Bank, Washington, D.C.

US-AID. 1989. US-AID debt for development initiative. News release. 3 August 1989. US Agency for International Development. Washington, D.C..

US Information Service. 1990. *Lat-Am (Latin American) Debt Reductions Could Support Environment*. Notes on Economic Affairs 157. 5 July 1990. US Information Service (USIS), Washington, D.C.

von Droste, B. & P. Dogsé. 1990. *The Third World Debt Crisis and Related Causes of Tropical Forest Destruction*. Invited paper presented at the conference on "Man and his environment: Tropical forests and the conservation of species". Pontifical Academy of Science, Vatican City, 14-18 May 1990.

Wagner, R.B. 1990. Doing more with debt-for-nature swaps. *International Environmental Affairs* 2(2): 160-165.

World Bank. 1989. *The World Bank Annual Report 1989*. World Bank, Washington, D.C.

World Bank. 1990a. Possible World Bank support for debt-for-nature swaps. Document IDA-R90-74. World Bank, Washington, D.C.

World Bank. 1990b. *The World Bank and the Environment. First Annual Report, Fiscal 1990*. World Bank, Washington, D.C.

World Commission on Environment and Development. 1987. *Our Common Future*. Oxford University Press, Oxford.

World Resources Institute. 1989. *Natural Endowments: Financing Resource Conservation and Development*. International Conservation Financing Project Report. Commissioned by the United Nations Development Programme. World Resources Institute, Washington, D.C.

World Wildlife Fund-US. 1987. Debt for nature agreement between World Wildlife Fund-US and Fundación Natura. 14 December 1987. WWF-US, Washington, D.C.

World Wildlife Fund-US. 1988. Debt-for-nature agreement between World Wildlife Fund, Department of Environment and Natural Resources of the Republic of the Philippines, and the Haribon Foundation. 24 June 1988. WWF-US, Washington, D.C.

World Wildlife Fund-US. 1989a. Amended and restated debt-for-nature-agreement between World Wildlife Fund-US and Fundación Natura. 4 April 1989. WWF-US, Washington, D.C.

World Wildlife Fund-US. 1989b. WWF & Madagascar announce first debt-for-nature swap in Africa. News release. 3 August 1989. WWF-US, Washington, D.C.

Word Wide Fund For Nature. 1989. WWF in US $2.27 million debt-for-nature swap with Zambia. Press release. 15 August 1989. WWF International, Gland.

45-752 - 91 - 5

ANNEX 1

The Biosphere Reserve Concept

The International Co-ordinating Council that guides Unesco's Man and the Biosphere (MAB) Programme introduced the biosphere reserve concept in the early 1970s. The goal was to establish a series of protected areas, linked together by a co-ordinated international network, with the objective of demonstrating the benefits of conservation to the society and the development process. This goal was to be achieved by emphasizing the combination of different biosphere reserve management components, such as scientific research, environmental education, training, environmental monitoring and local participation (sustainable human activities). Multiple use and zoning of the reserve into different areas are central to the concept (see Figure 7). The first biosphere reserves were designated in 1976. By mid-1990, a total of 283 reserves (located in seventy-two countries) had been established, covering an area of approximately 1,500,000 km^2. The major characteristics of biosphere reserves are outlined in Box 3.

The MAB Council launched an Action Plan in 1984, to guide the implementation of the biosphere reserve concept. It spells out nine broad objectives and thirty-five specific actions, which together form three major thrusts: improving and expanding the network; using the network as permanent sites for research and monitoring; and making conservation in biosphere reserves socially acceptable by combining conservation with development and emphasizing the participation of local people. In 1988 the MAB Council, underlined that debt-for-nature exchanges should be considered because of their potential in bringing additional financial resources into biosphere reserve management, which were seen as important for the future success of the programme.

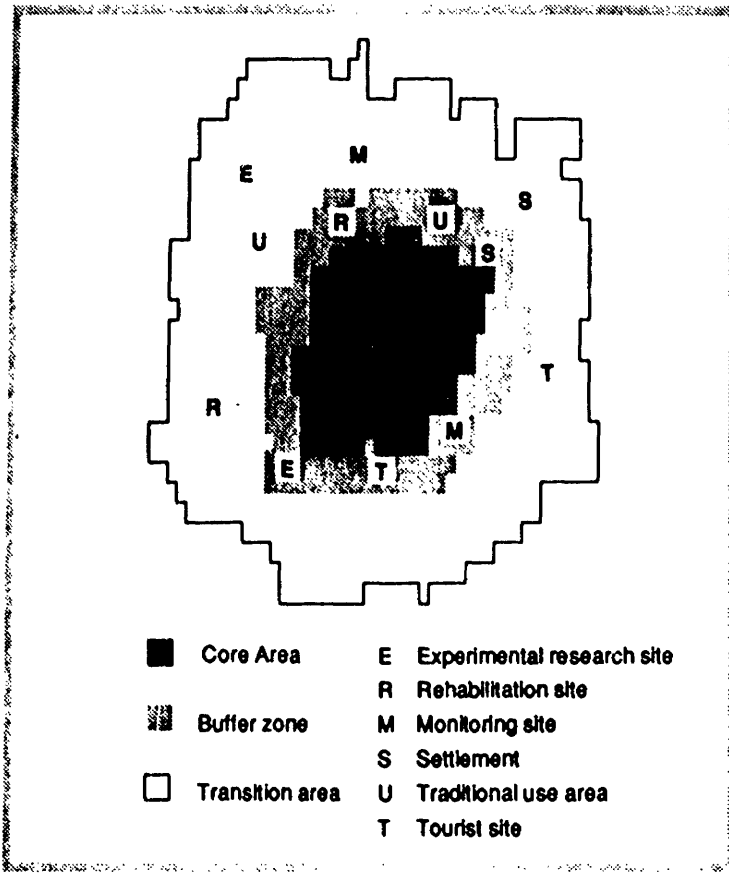


Figure 7: A model biosphere reserve.

Box 3: Characteristics of Biosphere Reserves

1. Biosphere reserves are protected areas of representative terrestrial and coastal environments which have been internationally recognized for their value in conservation and in providing scientific knowledge, skills and human values to support sustainable development.

2. Biosphere reserves are united to form a world-wide network which facilitates sharing of information relevant to the conservation and management of natural and managed ecosystems.

3. Each biosphere reserve includes representative examples of natural or minimally disturbed ecosystems (core areas) within one of the world's biogeographical provinces; and as many of the following types of areas as possible:

   (a) centres of endemism and of genetic richness or unique natural features of exceptional scientific interest (which may be part or all of the core area);

   (b) areas suitable for experimental manipulation to develop, assess and demonstrate methods for sustainable development;

   (c) examples of harmonious landscapes resulting from traditional patterns of land use;

   (d) examples of modified or degraded ecosystems that are suitable for restoration to natural or near natural conditions.

   Collectively, above mentioned areas provide the framework for carrying out the scientific and management functions of biosphere reserves.

4. Each biosphere reserve should be large enough to be an effective conservation unit, and have value as a bench-mark for measurements of long-term changes in the biosphere.

5. Biosphere reserve should provide opportunities for ecological research, education, demonstration and training.

6. The 'buffer zone' may consist of any one or some combination of (ii) to (iv) of (c) above, which are areas suitable or used for research purposes. In addition, the 'buffer zone' may also include a larger area which may be undelineated but where efforts are made to develop co-operative activities which ensure that uses are managed in a manner compatible with the conservation and research functions of the other areas of the reserve cited in (c) above. This multiple-use area may contain a variety of agricultural activities, settlements and other uses and may vary in space and time, thus forming an 'area of co-operation' or 'zone of influence'.

7. Biosphere reserves must have adequate long-term legislative, regulatory or institutional protection. Biosphere reserves may coincide with or incorporate existing or proposed protected areas, such as national

parks or protected research sites. This is because some of these protected areas are often the best examples of the natural unaltered landscape or because they constitute suitable areas for carrying out the various functions of biosphere reserves.

8. People should be considered as part of a biosphere reserve. Because they are an essential component of the landscape and their activities are fundamental for its long-term conservation and compatible use. People and their activities are not excluded from a biosphere reserve; rather they are encouraged to participate in its management in order to ensure a stronger social acceptance of conservation activities.

9. Normally, their is no need for changes in land-holding or regulation following the designation of a biosphere reserve except where changes are required to ensure the strict protection of the core area or of specific research sites.

Source: Nature and Resources, No. 4, October - December 1984.

ANNEX 2

Summary of established debt-for-nature agreements

The debt-for-nature programmes that have been established as of mid 1990 are listed and summarized in Tables A and B (Dogsé 1990). Added together, the exchange sums agreed upon amount to more than US $300 million face value of debt, of which US $96.01 million already has been exchanged for a total of US $58.16 million in conservation funds (not considering interest paid on the bonds nor inflation or foreign exchange rates that influence the real value of the funds) - an average redemption price of 61% of the face value ($58.16 million / $96.01 million). The total investment cost (the cost of buying the debt) was US $15.42 million (some debts were donated). The secondary debt market price ranged from 11.9 to 51.3 cents on the dollar, with an average of 16.1 cents ($15.42 million / $96.01 million). The aggregated financial incentive to the conservation investors[1] is US $42.74 million, which implies that they received 3.76 dollar in conservation bonds for each dollar invested in debts. The financial incentive to the debtors totals US $37.85 million ($96.01 million - $58.16 million).

1. Acronyms used in Table 2a
CI= Conservation International
IFESH= International Foundation for Education and Self-Help
INBIO= National Biodiversity Institute of Costa Rica
MBG= Missouri Botanical Garden
NPF= National Parks Foundation of Costa Rica
PRCT= Puerto Rican Conservation Trust
TNC= The Nature Conservancy
UNICEF= United Nations International Children's Fund
USAID= United States Agency for International Development
WWF-Int= Word Wide Fund For Nature-International
WWF-US= World Wildlife Fund of the United States
N.A.= Information not available to the author

Table A. Established debt-for-nature agreements

Date agreem. estab-lished	Date debt exchange executed	Debtor country	Debt exch. ceiling, face value US$ million	Secondary market price cent/$	Cost US$ million	Face value of debt acquired US$ million	Redempt. price % face value	Conserval. funds generated US$ million	Conservation investor
07/87	07/87	Bolivia	0.65	15.0	0.10	0.65	39	0.25	CI
08/87	12/87-02/88	Costa Rica	5.40	17.0	0.92	5.40	75	4.05	NPF
10/87	12/87 (part I)	Ecuador	10.00	35.4	0.35	1.00	100	1.00	FN/WWF-US
	04/89 (part II)	Ecuador		11.9	1.07	9.00	100	9.00	FN/WWF-US, TNC/MBG
06/88	07/88	Costa Rica	33.00	15.1	5.00	33.00	33	9.90	Gov. of the Netherlands
06/88	01/89 (part I)	Philippines	2.00	51.3	0.20	0.39	100	0.39	WWF-US

Source: Dogsé 1990.

Local fund adm.	Participating banks and credit institutions	Donors	Terms and aims
Bolivian Academy of Sciences, Ministry of Agriculture and Peasant Affairs	Citicorp Investment Bank	Frank Weeden Foundation	The US $650,000 debt was cancelled in exchange for full legal protection of the Beni Biosphere Reserve and a $250,000 management fund in local currency. The Bolivian government also agreed to establish four buffer zones in connection with the Beni Biosphere Reserve (ref: Conservation International 1987, Conservation International 1989).
NPF in consultation with the donors	Costa Rican Cooperative Bank (financial intermediary), City Bank, Swiss Bank	TNC, WWF-US, Pew charitable Trust, Jessie Smith Noyes Foundation, Asociacion Ecologica La Pacifica, John D. and Catherine T. MacArthur Foundation, Swedish Society for the Conservation of Nature, W. Alton Jones Foundation, Organization for Tropical Studies	The programme was proposed by the Costa Rican Ministry of Natural Resources, Energy and Mines, and was approved by the Central Bank in August 1987. Donations from various donors were given directly to the National Park Foundation which purchased the debt and exchanged it for monetary stabilization bonds, with maturation periods of up to six years paying an average interest rate of 25%. The goal of the programme is to fund conservation, environmental education, ecological tourism, sustainable forestry and land purchases (ref: Umaña Quesada 1989).
Fundación Natura	Bankers Trust, Citicorp	n a	Fundación Natura signed the agreement with the Ecuador government under which Fundación Natura was authorized to exchange $10 million in debt for monetary stabilization bonds denominated in sucres. In December 1987, WWF-US reached an agreement with the foundation to provide financial support and to arrange for purchase of the debt. WWF-US bought the first million of debt in March 1988. The interest payable on the bonds is used by Fundación Natura in connection with the maintenance and conservation of Ecudaor's national parks The interest rate was 31% the first year and is thereafter tied to the interest paid by Ecuador's five largest banks The bonds mature in nine years The principal will become an endowment for Fundación Natura
Fundación Natura	Morgan Guaranty Trust, Bankers Trust, American Express Bank	n a	The second part of the programme was executed in early 1989 by WWF-US and the Nature Conservancy. The bonds received in exchange for US $9 million of debt pay interest every six months (the rate is set as on the first bonds) and the principal is amortized in seven years, starting in 1990 Income from the bonds will be invested by Fundación Natura in management and conservation programmes in protected areas (ref: World Wildlife Fund 1987, World Wildlife Fund 1989a, Nature Conservancy 1989)
Costa Rican Ministries of Natural Resources and Planning	n.a	Government of the Netherlands	The primary objective of was reforestation operations and sustainable development activities in co-operation with various local interest groups like peasant organizations and co-operatives. The allocation of the interest payments (4 year maturation and 15% interest rate) is determined by the Costa Rican Ministries of Natural Resources and Planning in consultation with the Dutch Government (ref. Umaña Quesada, 1989).
Haribon Foundation	Bankers Trust	n a	The US $2 million swap package was developed by the Philippine government, WWF-US and the Haribon Foundation. The first exchange following the agreement was made by WWF-US exchanging US $390,000 in debt for funds contributing to implementation of a conservation strategy, protected area management, strengthening of conservation groups, and training (ref. World Wildlife Fund 1988).

Date agreem. estab-lished	Date debt exchange executed	Debtor country	Debt exch. ceiling, face value US$ million	Secondary market price cent/$	Cost US$ million	Face value of debt acquired US$ million	Redempt. price % face value	Conservat. funds generated US$ million	Conservation investor
07/88	01/89	Costa Rica	5.60	14.0	0.78	5.60	30	1.68	TNC, NPF
12/88		Sudan	0.80	Bank donation	-	0.80	-	0 80	UNICEF
04/89	04/89	Costa Rica	24.50	14 3	3 50	24 50	70	17.10	Gov. of Sweden
05/89	04/90 (part Ia)	Costa Rica	45 00	18 2	0 91	5 00	100	5.00	NPF
05/89	04/90 (part Ib)	Costa Rica		18 2	1 04	5 75	80	4 60	NPF
07/89	No transactions ?	Peru	10-20 00	Bank donation	-	(5 00)	100	(5 00)	IFESH
08/89	08/89 (part I)	Madagascar	3 00	45 2	0 95	2 10	100	2.10	WWF-US

Local fund adm.	Participating banks and credit institutions	Donors	Terms and aims
NPF	American Express Company	n.a	The Nature Conservancy bought the debts from the American Express Company and then sold them to the National Parks Foundation for 11 cents on the dollar. The bonds pay an interest rate of 15% and will mature in four years. The income will help build up the National Biodiversity Institute, support NPF and the Neotropian Foundation, protection of endangered species, and management of national parks (ref: Umaña Quesada 1989).
UNICEF	Midland Bank	Midland Bank	Debt-for-development swap: Midland Bank donated US $800,000 of Sudanese loans to UNICEF which had a deal with the Sudanese government that local money, in exchange for the loans, would be spent in providing water wells with hand-pumps in ten villages (ref: The Economist 1987).
NPF	Salomon Brothers	Swedish government, Swedish students and private conservation groups	The swap proceeds will be used for expansion and protection of Guanacaste National Park. The bonds mature in four years and pay an interest rate near 15% (ref Umaña Quesada 1989).
NPF	Salomon Brothers, Lafisse	Swedish government, WWF-International, TNC (loan)	This three year programme (which could be classified as a debt-for-development programme) adopted in 1989 allows that US $15 million face value of debt is exchanged per year for conservation, education and micro-enterprises projects Costa Rica's National Parks Foundation exchanged in April 1989 US $ 10.75 million face value debts for conservation bonds US $5 million were swapped for 20 years local currency bonds with 8% annual interest rate at 100% face value. These incomes will be used mainly for land compensations in La Amistad Biosphere Reserve The WWF-International donation (US$ 100,000), administered by WWF-US, will be used as a management endowment for La Amistad
INBIO	Salomon Brothers, Lafisse	Swedish Government, Pew Charitable Trust, W Alton Jones Foundation, US-AID	The second part of the deal, US $5 75 million, were exchanged for dollar denominated 20 year bonds with 3% interest and 80% face value, the income from which will support the National Biodiversity Institute of Costa Rica (ref Umaña Quesada 1989, Janzen 1990)
IFESH	American Express	American Express	Peru adopted a debt for-development law in July 1989 The law provides a framework for debt-exchanges for various activities. micro-enterprises, nutrition, health, family planning, conservation, education, agricultural development, and historic preservation American Express donated US $5 million in Peruvian debt paper for the first projects approved (but so far not executed) under the programme, which includes training activities and teaching for the very poor (Lagniappe Letter 1989).
WWF-US in co-operation with the Government of Madagascar	Bankers Trust Company, National Westminster Bank PLC, Dresdner Bank, Amro Bank, Banque de l'Union Européenne, Crédit Commercial de France, Société Général	US-AID	Using the official exchange rate, the debt will be exchanged for local cash. US-AID will cover up to US $1 million of the costs and provide US $300,000 for hard currency expenditures in relation to the swap agreement. This agreement aims at supporting conservation work built on education, sustainable development methods, and conservation, in priority protected areas WWF-US plans to exchange the remaining US $900,000 under the agreement before 1992 (ref World Wildlife Fund 1989b).

Date agreem. estab-lished	Date debt exchange executed	Debtor country	Debt exch. ceiling, face value US$ million	Secondary market price cent/$	Cost US$ million	Face value of debt acquir. US$ million	Redempt. price % face value	Conservat. funds generated US$ million	Conservation investor
08/89	08/89	Zambia	2.27	20.7	0.47	2.27	100	2.27	WWF-Netherlands-
10/89	No transactions	Ecuador	50.00	-	-	-	50	-	
11/89	01/90	Poland	0.05	23.0	0.01	0.05	100	0.05	WWF-Internat., WWF-Sweden
12/89	No transactions	Argentina	60.00	-	-	-	-	-	-
03/90	03/90 (part I)	Dominican Republic	80.00	20.0	0.12	0.58	100	0.58	PRCT, TNC
05/90	No transactions	Madagascar	5.00	-	-	-	100	-	CI
TOTAL			**337-347.3**	**-**	**15.42**	**96.01**	**-**	**58.16**	
AVERAGE				**16.1**			**61**		

Local fund adm.	Participating banks and credit institutions	Donors	Terms and aims
Government of Zambia in consultation with WWF.	NMB Bank	Anonymous Swiss donor	The debts were exchanged for local currency which will be used for conservation and management of wetlands, education programmes, support to local conservation institutions, alleviation of soil erosion, and protection of rhino and elephant populations (ref: World Wide Fund For Nature 1989).
n.a	n.a	n.a	The government of Ecuador approved in October 1989 a US $50 million debt exchange programme. The Central Bank will allow that commercial Ecuadorian debt be exchanged (50% of face value) for monetary stabilization bonds paying interest in local currency, to support social, cultural, environmental, and education programmes. The Ecuadorian swap programme has, therefore, expanded beyond debt-for-nature into debt-for-development. The Government agreed in February 1990 that the Rotary Club may buy and exchange debt (US $5 million, which is the maximum amount allowed per investor) for financing of a malaria eradication programme (ref: Junta Monetaria del Ecuador 1989).
n.a	NMB Bank	n.a	The exchange was set up as a first experimental exercise in what is hoped to be a large-scale Swedish-Polish project aiming at cleaning up the River Vistula. The revenue from the exchange will support the development of Biebrza National Park.
Neuquén Foundation, Lorenzo Parodi Foundation	n.a	n.a	Argentina's National Development Bank (BANADE) approved that up to US $60 million in debt is exchanged for special BANADE conservation bonds, paying interest either in US dollars or local currency (depending on project needs). The bonds will benefit two national ecological groups: the Lorenzo Parodi Foundation (US $30 million and the Neuquén Foundation (US $30 million). Programmes envisaged include watershed protection and management of national parks and reserved areas (ref: Orme 1990).
PRONATURA Fund	MG-First Boston	PRCT	The PRONATURA Fund, which consists of 11 of the Dominican Republic's conservation and development groups, reached an agreement with the Central Bank under which within four years up to US $80 million of the country's external debt may be exchanged, at 100% face value, for conservation projects. The US $80 million represents 10% of the Dominican Republic's commercial debt. The first exchange under the programme of US $582,000 (funded by the Conservation Trust of Puerto Rico) will support four conservation projects developed by the Nature Conservancy and PRONATURA, which also administrates the proceeds (ref. Orme 1990, Nature Conservancy 1990a).
n.a	n.a	n.a	The Government of Madagascar has agreed that Conservation International exchanges US $5 million of the nations commercial bank debt and trade credits, at 100% face value, over the next five years. The swap proceeds may be deposited in private Malagasy banks as an endowment fund paying interest in local currency. The fund is intended to support conservation activities, including inventories of endangered species, environmental, and education programmes (ref. New York Times 1990).

Table B. Total debt-for-nature volumes

Country	Total sum of face value of debt (US $ million) Eligible for debt-for-nature conversion	Actually exchanged	Eligible for conversion but not yet exchanged	Total sum of conservation bonds generated by debt-for-nature conversion (US $ million)
Costa Rica	113.50	79.25	34.25	42.33
Dominican Republic	80.00	0.58	73.42	0.58
Ecuador	60.00	10.00	50.00	10.00
Argentina	60.00	0.00	60.00	0.00
Peru	10.00-20.00	0.00	10.00-20.00	0.00
Madagascar	8.00	2.10	5.90	2.10
Zambia	2.27	2.27	0.00	2.27
Philippines	2.00	0.39	1.61	0.39
Sudan	0.80	0.80	0.00	0.80
Bolivia	0.65	0.65	0.00	0.25
Poland	0.05	0.05	0.00	0.05

Source: Dogsé 1990.

Prepared Statement of Carlos E. Quintela

Mr. Chairman, members of the Committee, I am very pleased to be here today and to have the opportunity to share with you my thoughts on debt, the environment, and on how Bolivia's debt swap programs will be used to advance our efforts to implement the Bolivian environmental program.

My name is Carlos E. Quintela and I am the Executive Director of Bolivia's National Environmental Trust Fund (the Fund). The Fund was created by Supreme Decree in December of 1990 to be the principal agency responsible for raising and managing funds for conservation and sustainable development programs, tracking the progress of each project funded, and reporting to the donor organizations. In addition to direct grants and investments from bilateral, multilateral, and private agencies, the Fund is actively pursuing debt swaps as important mechanisms to alleviate the burden of Bolivia's external debt and to fund priority conservation and sustainable development projects.

SUMMARY

Debt-for-nature swaps—in the broadest sense of the term—have attracted more attention because of the novelty of the procedure than because of the amounts that they have made available for conservation and sustainable development. Even though these transactions have contributed to expand the financial resource base for environmental projects their impact on the debt situation has been minimal. The most important contribution of the debt swaps has been the creation of a predictable, stable income stream for natural resource management, sustainable development, and related activities.

Debt swaps have sparked the need to establish environmental funds like Bolivia's National Environmental Trust Fund. These funds are being created to expand the financial resources available for environmental projects, through grants and other means in addition to debt swaps. These funds are also becoming important tools in the definition of major programs aimed at meeting the most critical environmental needs of developing nations, which are no longer perceived as mere abstractions, but as real problems that need immediate attention. Initiatives like the *Pausa Ecológica* signed into effect by Bolivia's President Jaime Paz Zamora in January of 1990, are the best indication that Latin American countries are looking for better ways to go about the business of providing for the needs of their people. Too much is being lost—irreparably lost—for the sake of short term benefits.

The Enterprise for the Americas Initiative is significant because it aims at reducing the burden placed on debtor countries to service their bilateral debt with the United States at the same time that it makes available local currency funds for conservation and sustainable development projects. We are encouraged by the US Congress' approval of legislation that authorizes the President of the United States to negotiate the reduction of PL-480 debt and to allow the interest on the restructured debt to be paid in local currency into national environmental funds. We hope that similar legislation dealing with USAID and non-concessional debts is approved this year.

LINKAGE BETWEEN DEBT AND POVERTY

It is very difficult, if not impossible, to ignore the direct connection that exists between debt and poverty. Virtually every developing nation has shown a decrease in the quality of life with an increase in the service of their external debt. Although correlation does not imply causation, in the case of debt and poverty there is a definite cause-and-effect relationship. Countries burdened with external debt obligations are having to make very difficult choices which invariably result in a severe decline in the standard of living of the population. Developing countries are going through one of the worst periods in the world's history. This period has been called the *lost eighties* because with the failing economies of many developing nations the socio-economic indicators (e.g., mortality rates, per capita income, and others) have shown a significant decline. Debt has unquestionably played a significant role in making a bad situation worse.

I would like to show you some numbers, using Bolivia as an example, which will illustrate the effect external debt is having in one country's economy.

The structure of Bolivia's external debt is rather different from that of other countries, in that the most important components of the total external debt are the bilateral and the multilateral debts, which account for 48% and 44%, respectively. Commercial debt accounts for less than 6%. Bolivia's total external debt obligations (US$3.4 billion) is rather small by most standards. However, when we put it in a macroeconomic context it is clear the impact that it has on the national economy and the quality of life of the Bolivian people:

- The public sector debt represents approximately 80% of the GDP.
- It takes 5% of the GDP and 30% of the exports to service the total external debt.
- While the per capita income stands at US$580, the per capita debt at the end of 1989 was US$590.
- At the current interest rates, the service of the external debt implies a significant reduction in the per capita consumption to levels lower than in the 1970s.

These statistics are true even after significant debt reduction has been accomplished. Bolivia's commercial debt reduction program has retired to date well over 70% of the 1987 commercial debt. Bilateral debt reduction transactions have eliminated close to one billion dollars of Bolivia's external obligations with Argentina and Brazil, and with other countries in the context of the Club of Paris. In addition to the above-mentioned debt reduction transactions, Bolivia has been granted the Toronto Treatment terms on the balance which has reduced significantly the service of the external debt.

Bolivia has been left with few options but to be creative and find ways to reduce the cost of servicing the external debt or to allow poverty to continue to take its toll. The success in Bolivia's debt reduction efforts, however great compared to those of other countries, is still not enough. Further reduction in the external debt remains an essential pre-requisite for the improvement of the socio-economic indicators, which continue to place Bolivia among the poorest nations in the hemisphere.

LINKAGE BETWEEN POVERTY AND THE ENVIRONMENT

The relationship between poverty and environmental degradation needs no elaborate explanation. It has been clearly demonstrated that in places where extreme poverty forces the people to overexploit the resources, the damage can be so deep, that the cost of bringing those lands back into production would be much greater than the cost of having used the resources sustainably. Unfortunately, the nations that have suffered poverty-induced environmental catastrophes did not have the resources to manage and ensure the sustainable use of the resources then, nor do they have the financial means to restore the degraded environments now. Those nations are faced with the reality of dwindling resources, increased dependency on foreign aid, and what is worse, with a chronic decline in the standard of living of the most neediest segments of the population. Tropical nations, which have most of the biological diversity of the planet, also have the most serious cases of poverty-induced environmental degradation.

Slash-and-burn practices have been frequently used to illustrate the gross mismanagement of tropical forests. Although the factors that act to perpetuate this practice are many, there is one question that still finds no practical answers: what is a poor farmer to do. Again I would like to use Bolivia as an example that may help us visualize the problem better.

In 1985 the Bolivian government initiated what has been the longest running and harshest economic recovery program in Latin America. The objective was to significantly reduce inflation which was at 28,000% a year, and to instate market-oriented reforms. In the process, which also coincided with a significant drop in the price of tin, Bolivia's main export for over three decades, 60,000 workers were laid off, raising the unemployment rate by over 3%. Some were given an opportunity to restart in other regions with support from the government, but the majority were not so lucky. Programs like the multi-million dollar Social Emergency Fund were initiated to help improve the situation. But all the efforts to minimize the social impact of the reforms were not sufficient to prevent thousands of people from moving from the highland to the lowlands in search of ways to survive. Many went into planting coca in the lower montane regions of Bolivia. Others went into the Department of Santa Cruz and started the slash-and-burn cycle. But, whether the crop was coca, coffee, or rice, the effect was the same. A process was started that further reinforced the existing trend of non-sustainable resource use and was aggravated by hunger and need. This trend continues today. There is less coca being planted, but there are no fewer peasants that must cut a new patch of forest to make a living.

DEBT SWAPS: IMPERFECT PAST AND PROMISING FUTURE

The term debt-for-nature swaps refers to a particular type of transaction that involves the exchange of debt titles for local currency bonds or cash for conservation and sustainable development projects. The great promise of this type of transaction is that it can help reduce the external debt of developing nations while it creates a predictable and stable income stream for natural resource management, sustainable development, and related activities. At the same time that we realize the potential of this mechanism we must not overlook the all important fact that the results of any debt swap will only be as good as the programs that they support.

The first debt-for-nature swap was done in Bolivia. In the most general terms the transaction involved the exchange of US$650,000 of Bolivia commercial debt, purchased for US$100,000 by a foreign non-government organization, in exchange for the agreement by the Government of Bolivia, among other things, to create an endowment of US$250,000 for the management of the Beni Biosphere Reserve. In principle the idea was good but it had several flaws which have been corrected in subsequent transactions in many other countries. Perhaps the most significant mistake made was that the Bolivian implementing organization—the Beni Biosphere Reserve project of the National Academy of Sciences—and the other Bolivian organizations already working in the area were not part of the transaction and played no role in its development until the transaction was completed. From this point on the Bolivian debt swap encountered a series of obstacles originating from the fact that national institutions and indigenous peoples were excluded from the debt swap process.

In spite of all the problems, the contribution of the Bolivian transaction was to get the ball rolling and to point out some of the pitfalls of the mechanism. Since then there have been at least 16 transactions in 8 countries which have resulted in the exchange of approximately US$100 million in debt titles for US$60 million in local currency funds for the environment. The impact has been unquestionably positive. However, debt-for-nature swaps are no longer viewed as *ad hoc* transactions to support isolated projects. They are being integrated as an element of more complex and substantial fundraising efforts on the part of the governments of many developing nations. I am pleased to say that once again Bolivia, with the creation of the National Environmental Trust Fund, is a leader in this process.

BOLIVIA'S NATIONAL ENVIRONMENTAL TRUST FUND

The establishment of Bolivia's National Environmental Trust Fund was not an isolated event. It is the result of the unwavering commitment to the environment of President Jaime Paz Zamora and his administration, who, in January of 1990, declared a *truce on nature*, and signed into effect the *Pausa Ecológica* (Pause for the Environment). The *Pausa Ecológica*, calls for a new vision of economic development, sustainable and in harmony with the environment. This significant step is Bolivia's way of facing the global challenge of protecting the environment for Bolivians and for the rest of the world.

The Fund was created, and is now operating with support from USAID, to grasp the opportunities that have been developed to expand the financial resources available for environmental projects (e.g. Enterprise for the Americas Initiative, Global Environment Facility, commercial and bilateral debt swaps) and to be the principal agency responsible for the implementation of the *Pausa Ecológica*. In addition to raising monies, the Fund is responsible for tracking the progress of each project funded and for reporting to the donor organizations. One other important objective of the Fund is to provide technical assistance in the design, implementation, evaluation and financial management of conservation and sustainable development projects to the organizations—public and private—that participate in the programs of the *Pausa Ecológica*.

The importance given to the Fund and the programs that it supports has been made clear by its position within the government structure and the composition of its board. As its Executive Director I report directly to the President of the Republic and to a board of directors that includes, on the government side, the Secretary General of the Environment, and the Ministers of Agriculture and Peasant Affairs, Planning and Coordination, and Finance; and, on the private side, the *Liga para la Defensa del Medio Ambiente (LIDEMA)*—a coalition of conservation organizations—, the *Fundación Amigos de la Naturaleza (FAN)*—the principal implementing organization of the USAID funded Parks in Peril Program—, and the *Confederación de Indigenas del Oriente Boliviano (CIDOB)*—the confederation of indigenous organizations of the eastern lowlands.

The Fund has been designed to allow for the greatest flexibility and accountability in the management of the monies raised. For each donation of debt or cash, the Fund will open an account which will have its own administrative board. These boards will be composed of representatives from the donor countries and organizations, from the executing agencies (government and non-government), from the Secretariat General of the Environment, and from the Fund. One important characteristic of the Fund is that it allows for the participation of many donor nations and organizations with all the assurances that the programs supported by the Fund would advance in a coordinated fashion and that the different accounts would be managed separately, with the complete participation of the donor and implementing organizations.

Trust funds, similar to the Bolivian National Environmental Trust Fund, are being created in many countries. These funds have specific characteristics to meet their national needs. Many of them managed by mixed boards composed of government agencies and private organizations. Among other countries that have created such funds or that are making progress in this direction are Costa Rica, the Dominican Republic, Ecuador, Jamaica, Panama, Paraguay, Argentina, El Salvador, Madagascar, and Bhutan. What is important about these funds is that, although they may intend to use debt swaps as an important source of funding, most are being structured to insure that they can accept funds from a variety of sources including grants from international and domestic, private and public organizations.

LA PAUSA ECOLOGICA: THE FIRST STEP IN THE IMPLEMENTATION OF THE BOLIVIAN ENVIRONMENTAL PROGRAM

What lends credibility to the Bolivian efforts, however, is not just the innovative ways that we have found to make debt swaps work for us or the structure of our National Environmental Trust Fund. It is instead that these financial mechanisms will come to support a well defined and comprehensive environmental program.

In order to adequately address Bolivia's environmental needs it was first necessary to make profound changes in the institutional framework that supported these activities. These changes resulted in the creation of the Secretariat General of the Environment and the Fund. Environmental planning was the first and most daunting challenged faced by the Secretariat, which, with support from USAID, designed the environmental action plan as a process, not as a one-time document. This environmental action plan will set the guidelines for every aspect related to the environment (e.g. sustainable development activities, pollution control, research, education, and the conservation of biodiversity). But, the most important outcome of this process will be the insertion of environmental considerations in the national development plans and strategies. The environmental action plan will be the most important tool for the Fund. It will be the instrument that will chart the course of what needs to get done in order to accomplish the primary objective of the *Pausa Ecológica*, to make this new vision of development, sustainable and in harmony with the environment, a reality.

While the planning process gets started and a framework environmental law—another project being done with the support of USAID—is discussed and approved in the Bolivian Congress, there is the need to initiate actions that will have immediate results in the field and will develop the capacity of government and private organizations to carry out conservation and sustainable development projects. These objectives will be met by implementing five priority programs aimed at securing the conservation and sustainable use of natural resources and two others directed at minimizing the impact of development projects and reducing pollution:

- **Sustainable use of renewable natural resources**

This program of the *Pausa Ecologica* seeks to promote the protection and management of species and ecosystems for productive purposes. The renewable natural resources of Bolivia represent the economic future of the country. Bolivia is gradually abandoning an economy dependent on mining to enter a new stage, where the natural renewable resources will play a critical role in the national economy. Timber, for instance, represents a significant percentage of the income for the export of agricultural and forestry products. The adequate management of the forests will enable the maintenance and expansion of the timber production in a sustainable way.

In addition to timber, there are numerous products whose sustainable use could benefit significatively the indigenous and peasant communities. Among them, there is rubber and Brazil nuts, which, with a relatively small investment, could turn the forests of northern Bolivia into significant sources of income to a large proportion for the inhabitants of the region. A great variety of other native products, whose applications and markets have not yet been explored could offer similar opportunities.

- **Integrated watershed management**

The protection, restoration, and management of watersheds are vital elements in the process of economic development and environmental protection. Through this program, the *Pausa Ecológica* seeks to maintain the integrity of rivers and streams for the purpose of conserving and sustainably using the species and ecosystems associated with them. One of the first priorities is to continue controlling erosion and rehabilitating watersheds in the altiplano and the valleys whose deterioration forces the migration of peasants to other regions of the country.

• **Research and education**

The lack of scientific information and qualified personnel is one of the major obstacles in the implementation of Bolivia's environmental program. The *Pausa Ecológica* has as one of its principal goals to support teaching and research institutions. Among the priorities of this program is the support to universities, government agencies, and non-government organizations that collect and manage scientific information useful for the protection and sustainable use of natural resources. No less important is environmental education. The *Pausa Ecológica* will contribute to create an increased awareness of the environmental problems that afflict the country and the world, and to improve our understanding of the intimate relationship between economic prosperity and environmental quality. The *Pausa Ecológica* will promote and support environmental education programs that teach about the environment, the consequences of its deterioration, and how best to preserve environmental quality for all Bolivians.

• **Management of protected areas and preservation of biodiversity**

The protection and maintenance of biodiversity is a stated priority of the *Pausa Ecológica* The diversity of species holds immense promise for the future of Bolivia, one of the biologically wealthiest nations in the world. The *Pausa Ecológica* will create the conditions under which the government agencies, in close cooperation with non-government organizations, will be able to preserve biological diversity by effectively managing the national system of protected areas, parks, and reserves, and by promoting their non-extractive use (i.e., research, education, tourism).

One excellent example of the on going activities under this program is the Parks in Peril Program which is being funded by USAID and coordinated by The Nature Conservancy. Parks in Peril seeks to build conservation infrastructure in the hemisphere's 200 most imperiled tropical ecosystems, integrate these protected areas into the economic and cultural lives of their societies, and create long-term funding mechanisms to sustain the local management of these areas. We are pleased to be among the over 30 countries participating in this program and contributing to protect over 40 million hectares of the richest ecosystems in the hemisphere, and the world, this decade. We are also pleased that the first two protected areas to be incorporated in this program are the Bolivian National Parks Amboró and Noel Kempff, thanks to the great efforts of the Fundación Amigos de la Naturaleza, a member organization of the Fund's board of directors.

• **Indigenous and peasant community development**

An essential element in the process of integrating conservation and development is the support to those indigenous and peasant communities that are affected by, or depend on, conservation and sustainable development projects. With this program, the *Pausa Ecológica* will open new opportunities so that communities can benefit from conservation and sustainable development activities. Work will be done, specifically, with those communities that are next to, or under the influence of managed areas (i.e., national parks, watersheds) so that they can use them in a sustainable way (i.e., building of tourist infrastructure, sustainable and diversified use of renewable natural resources).

• **Other programs**

Environmental impact assessments.—The objective of this program in to support all the activities related to the assessment of the environmental impact of development projects and the monitoring of development projects for compliance with the established environmental guidelines.

Pollution control.—The Fund will help industries, municipalities and other agencies, public and private, in the management of their funds for pollution control programs.

DEBT SWAPS: A NOVELTY OR A REAL SOURCE OF FUNDS FOR CONSERVATION AND SUSTAINABLE DEVELOPMENT?

In paper debt swaps look great, and because of the novelty, the mechanism has attracted a great deal of attention. However, of the $400 billion of Latin American debt only $100 million (face value) have found their way into debt-for-nature transactions in a handful of countries. The *Pausa Ecológica* alone calls for an investment of roughly $10 million per year to get the Bolivian environmental program going, an amount that is expected to continue to increase as the programs become consolidated and the institutions' absorbtive capacity increases. This means that at least $1.2 billion in debt would have to be swapped in Bolivia alone to support this level of activity on a sustained basis. Other countries with greater needs will require more financial resources to initiate and maintain their programs. Debt swaps using commercial debt have been the only types of transactions done to date. Some countries, like Bolivia, that have little commercial debt left are now looking at the opportunities that bilateral debt swaps may bring. This is why the Enterprise for the Americas Initiative has been seen by my government as a good opportunity to help implement the *Pausa Ecológica*.

THE ENTERPRISE FOR THE AMERICAS INITIATIVE

The Enterprise for the Americas Initiative has come at an oportune time for Bolivia. Although the economic reform criteria have been criticized by some countries that will have to implement drastic adjustments to their economies if they want to participate in this Initiative, Bolivia, and a handful of other countries, namely, Chile, Colombia, and Jamaica, have already made those adjustments. Bolivia, for instance initiated a structural adjustment program, opened up its markets, and started on the road to privatization prior to the Enterprise for the Americas Initiative.

For the reasons presented above, Bolivia was ready and quick to respond to this opportunity. In September of 1990, three months after President Bush's announcement, the Government of Bolivia submitted its proposal to the Government of the United States. The wide range of economic reforms enacted over the last 6 years placed Bolivia in the ideal position to take full advantage of the opportunities offered by the Enterprise for the Americas Initiative to promote economic growth and the protection of the environment. These reforms would qualify Bolivia under the eligibility requirements of this program: Bolivia has the longest standing agreement with the International Monetary Fund on record in Latin America; the market oriented investment and financial reforms imposed to correct macroeconomic imbalances were a integral part of the 1985 economic adjustment and stabilization program; major efforts are being made to strengthen the private sector and to privatize public companies and industries; finally, as described earlier, Bolivia has made significant progress reducing commercial and bilateral debt, even though much more needs to be done in order to allow us to direct enough resources to priority poverty alleviation and environmental programs.

The Bolivian proposal submitted to the United States Treasury Department under the Enterprise for the Americas Initiative were:

(1) that the government of the United States of America agree to reduce Bolivia's concessional bilateral obligations by 89%, the same proportion used to reduce most of Bolivia's commercial debt, from approximately US$365 million to US$40 million;

(2) that the remaining concessional debt be rescheduled according to Option B of the Toronto Treatment terms, as stated in the Paris Club Agreed Minute of March 15, 1990;

(3) that the government of the United States of America authorize the government of Bolivia to make the payments of the interest due on the balance of the concessional debt in local currency into an account at the National Environmental Trust Fund, designated the Enterprise for the Americas Initiative Environmental Fund; the principal on the balance of the concessional debt will be repaid directly to the United States in U.S. dollars:

(a) that the funds from the interest payments mentioned above be used to support conservation and sustainable development projects under the five programs of the *Pausa Ecológica:* (i) sustainable resource management; (ii) watershed management; (iii) research and education; (iv) management of protected areas; and (v) support to communities that depend or are affected by conservation and sustainable development projects;

(b) that the programs be implemented by Bolivian, government and non-government, organizations and that the Enterprise for the Americas Initiative Environmental Fund established at the National Environmental Trust Fund be managed jointly by representatives of the United States and Bolivian governments, and representatives of non-government conservation organizations;

(4) that the approximately US$30 million in non-concessional bilateral debt be sold at an 89% discount, the same proportion used to reduce most of Bolivia's commercial debt, to eligible purchasers for debt-for-equity and debt-for-nature programs with the prior approval of the Bolivian and United States governments.

If this proposal were accepted as presented, the yearly income to the Fund from US sources would be US $1-2 million each year from the concessional debt and approximately US $0.5 million from the non-concessional debt, assuming that all of it is sold. With this endowment-like level of income it would be possible to support the implementation of a significant portion of the *Pausa Ecológica as described above. This type of long-term funding is badly needed to create a stable enough environment for us to become involved in doing what must* be done rather than to direct our effort to run after funds to do only what *can* be done.

Debt swaps have already proven to be a valuable tool in achieving conservation. Combined with serious debt reduction measures, like those proposed under the Enterprise for the Americas Initiative, debt swaps hold a potential for alleviating the burden of the external debt of developing nations. Bolivia is committed to make the most out of this mechanism and the National Environmental Trust Fund will work to see that on the ground results are achieved. We are encouraged by both the Bush administration and the US Congress response to the Enterprise for the Americas Initiative and hope that it can be made a reality in the near future. As I have stated earlier bilateral debt holds the potential that is far in excess of the commercial debt for a country like Bolivia, and we hope that this Committee will play an increasingly significant role in realizing this potential.

PREPARED STATEMENT OF JAMES GUSTANE SPETH

Mr. Chairman, members of the Subcommittee, I appreciate the opportunity to testify be fore you on the problem of external indebtedness and the degradation of natural resources in developing countries. There can be little doubt that the debt burden of developing countries is one of the principal barriers to sustainable development in those countries. To repay their loans, heavily indebted countries have to create trade surpluses through increased exports, often at the expense of the natural resource base. Limited economic growth and government austerity measures, two consequences of large debt and adverse capital flows, have put more burdens on the poor and placed new strains on soil, water and fuelwood resources. They also have weakened government programs that might have promoted conservation and environmental protection. However, properly addressed, the debt problem also presents an opportunity to promote both environmentally sustainable development and protection of the environment at both national and global levels.

Over the past year, I have served as Chairman of the Task Force on International Development and Environmental Security, convened last year by the Environmental and Energy Study Institute and consisting of five members of Congress and 16 environmental, business, science, labor, development and academic leaders.

Our Task Force agreed that a new era of international cooperation is urgently needed to address the linked economic and environmental challenges facing the developing world. We also agreed that the United States should play a major role in bringing this new era about. The time is ripe for a new U.S. mission internationally, one focused on promoting cooperative action to sustain the earth and its people.

Expanded U.S. cooperation with developing countries should be part of a larger North-South partnership founded on the mutual interests of all countries in economic progress and environmental protection. Leading the way toward such a global partnership for sustainable development is decidedly in the U.S. interest. In a world that is growing ever more interdependent, this country's economic fate is inextricably tied to that of the developing countries. So is the fate of the environmental niche Americans inhabit. The United States can no more protect global climate and biological diversity without developing countries' cooperation than developing countries can revive their flagging economies and relieve the vicious circle of poverty and resource degradation without America's cooperation.

Given the herculean challenges of the developing countries and the United States' stake in helping to meeting those challenges, we concluded that our country needs a bold, integrated program to cooperate with and assist developing countries.

In this context, the Task Force agreed unanimously that developing country indebtedness is one of the issues deserving highest priority in a new U.S. program of cooperation with developing countries. The final report of the Task Force, which has just been released this week, recommends that the United States undertake a bold initiative to reduce the pressure on natural resources in the developing countries by reducing their indebtedness. I would like to ask that relevant portions of the Task Force report, *Partnership for Sustainable Development*, be included in the record.

In my brief statement, I will explain why the Task Force has proposed a debt reduction initiative and what specific actions it recommends. (See Task Force Recommendation 4.)

Many specialists on world finance have urged debt reduction by the international community as essential for the health of the world economy. This Task Force does not disagree with that rationale, but it further urges debt reduction on the grounds that it is essential to make economic development environmentally sustainable.

The 1980s had a devastating impact on the economic status of many developing countries. At the beginning of the decade of the 1980s, there was a net positive flow of financial resources from industrial countries to developing countries. But by 1989, it had turned into a net drain of $32.5 billion from developing countries to the industrial countries. In order to repay their mounting debts, many developing countries have had to increase natural resource exports to the maximum, including tropical timber and agricultural export crops which have often required the conversion of tropical forests.

For example, Brazil provided new incentives for soybean plantations for export in the 1980s, in order to generate increased foreign exchange. The result of the creation of the large new plantations was that small farmers were displaced and were forced to migrate into the Amazonian rainforest. There they increased the pressure on the forests by trying to eke out subsistence farms on its fragile soils. Similar patterns have been reproduced throughout the developing world where countries have been under intense financial pressures.

Today, many Americans are justifiably concerned about worldwide environmental threats, including global climate change, loss of the planet's diversity of plant and animal life and deterioration of the natural resources needed to sustain expanding populations. These problems cannot be solved without the full participation and even the leadership of developing countries. Yet, these countries cannot confront global environmental problems if domestic environmental problems take all available effort, and they cannot address even domestic environmental challenges if their national economic and social challenges are overwhelming. The heavy burden of external debt is one of the principal reasons the economic and social challenges of many developing countries are often overwhelming.

The Task Force therefore recommended that the United States urge the establishment of an International Debt Management Authority by a consortium of aid-giving nations to purchase significant debt obligations of selected countries on the secondary market. The authority would negotiate with the debtor countries in question on the forgiveness of those debt obligations gradually over a period of years, in return for the adoption of policies and programs supporting sustainable development.

The International Debt Management authority recommended by the Task Force would be similar to the authority proposed by Congress in the Omnibus Trade and Competitiveness Act of 1988. The Debt Management Authority would be formed through a negotiated agreement of industrial countries; it would work closely with the International Monetary Fund and World Bank, and it would operate as a self-supporting entity, without regular appropriations from members governments. The major difference, however, would be that the policy reforms required for debt forgiveness would emphasize policy issues involving environmentally sustainable development rather than conventional resource utilization criteria.

Depending on the nature of the indebted nation' s needs, the policies to be encouraged might include implementation of national plan to control tropical deforestation, appropriate energy pricing and least-cost energy strategies, a strategy for reducing population growth, land tenure reform; measures to raise the legal, social and economic status of women, or manufacturing strategies emphasizing job creation. The debt obligations would be forgiven over a period of years on the basis of performance on agreed sustainable development policy commitments.

The emphasis on these policy reforms related to environmental and natural resource conservation reflects the growing realization that market-based economic policies cannot succeed unless the requirement of environmental sustainability is explicitly integrated into them. The Task Force recognizes that these policy reforms would not only be politically difficult in many cases but costly for cash-strapped developing countries to undertake. It recommends that these reforms be supported with special sectoral loans and other support through multilateral development banks and bilateral development agencies.

The cost of such an authority would depend on the scope of the program. Japan, the European Community and other OECD members could be expected to provide 75 to 80 percent of its costs (the same percentage contribution they currently make to bilateral development assistance and the World Bank), while the United States could provide the remainder. Purchase of debt on the secondary market provides a high degree of leverage for the amount invested. For example, the authority could buy $100 billion of developing country commercial bank debt (face value) for about $30 billion at current secondary market prices. If spaced over five years, such purchases would not impose an unmanageable burden on participating countries. In this example, the U.S. share would be $1.2 billion annually.

We feel that this approach of debt reduction in return for sustainable development policy reforms offers a series of powerful benefits. Economically, the debtor countries would obviously benefit, but so would the U.S. since about 40 percent of our export markets are now in developing countries. Environmentally, this proposal offers the type of powerful support that is needed if tropical forests are to be saved and global climate protected. I hope that all members of Congress and leaders in the private sector will come to see developing country debt relief as a wise investment in our own nation's economic future and in global environmental security.

I would like to elaborate on how the multilateral debt authority could play a constructive role in a global effort to arrest the loss of tropical forests. The world's tropical forests provide major economic and environmental benefits to the countries in which they are located as well as globally important functions. They provide commercially valuable products, control flooding and drought and protect soils from erosion, and they are home to indigenous peoples whose cultures depend on their sustainable management. Finally they are the habitats for most of the world's biological diversity and genetic resources, as well as sinks for gases that cause global climate change. Today, they are being lost at an estimated 40 million acres annually—80 percent faster than what was estimated at the beginning of the 1980s.

The causes of tropical forest loss are many and complex. They include conversion of forests to agricultural export croplands and cattle ranches; unsustainable commercial logging for domestic industrial uses and timber exports; encroachment into forest lands by landless farmers, overexploitation to meet demand for fuelwood and other forest products; and destruction of forest cover by mining, road building and dam construction.

Developing countries can provide incentives for reforestation for fuelwood and hardwood products, thus taking the pressure off primary forests, and eliminate incentives for replacing natural forests with plantations. They also can determine, within certain constraints, how much forest area gets exploited for agriculture or commercial crops and how much is protected Government tax incentives and other economic policies can bear directly on how much tropical rainforest is converted to agricultural export crops and ranchland. Other policy sectors, including population and family planning, also affect deforestation.

On the other hand, financial pressures on developing countries created by heavy debt burdens have increased the tendency to "mine" forest resources, causing those countries to rely heavily on tropical timber exports or agricultural export grown on forest land. Fourteen major debtor countries accounted for more than two-thirds of the estimated annual deforestation worldwide during the 1980s. The Task Force has recommended, therefore, that the United States propose the negotiation of a global partnership to bring deforestation under control and to move toward sustainable management of remaining primary forest areas. (See Task Force Recommendation 3.) The central mechanisms in this partnership would be national plans for slowing the loss of tropical forests, and a consortium of industrial countries and multilateral agencies committed to providing major support for such plans through a process of country-by-country discussions.

Depending on the needs of the particular country, the negotiated package of support could include phased debt reduction as the plan is implemented, as well as concessional financing and other forms support. The existence of a Multilateral Debt Authority could play a key role in helping to address the global challenge of saving tropical forests and their accompanying biological resources.

In conclusion, I would like to mention an attractive option for funding programs that are needed for global environmental protection and sustainable developments. The Task Force has addressed this option in its Recommendation 9, which calls for the adoption by Congress of energy and pollution taxes—such as a gasoline tax or a carbon dioxide emissions tax—that would make the price of energy more closely reflect its environmental and security costs.

Such a market-based U.S. energy strategy would reduce U.S. emissions of carbon dioxide and several other pollutants, strengthen U.S. energy efficiency, promote renewable and other alternative energy sources, reduce our dependence on imported oil from volatile regions such as the Middle East, and demonstrate good faith efforts by the United States to move to a sustainable energy future. The great bulk of the revenues generated through these taxes or emission fees should be returned to consumers through reductions in income or payroll taxes. This approach thus has the added benefit of shifting a share of the U.S. tax burden from "good things" we want to encourage; like labor and investment, to "bad things" we want to discourage like pollution and waste. Only a very small fraction of the revenues that can be raised in this way would be needed to finance the debt reduction and tropical forest initiatives recommended by the Task Force.

Various studies have indicated that a tax or fee on carbon dioxide emissions would be the most cost-effective policy instrument for these combined objectives. It could be implemented by imposing fees at the point of extraction or import of coal, petroleum and natural gas based on each fuel's carbon content per energy unit. Non-energy uses of fossil fuel would be excluded. Estimates of the costs of carbon taxes based on economic models typically have a built-in bias toward overstatement. They tend not to take into account the economic benefits from enhanced energy efficiency. Even so, a recent study by Dale W. Jorgenson and Peter J. Wilcoxen for EPA has estimated that a $60 per-ton carbon tax could reduce carbon emissions by 20 percent of 1990 levels by 2005 at a cost of 1.6 percent of U.S. GNP. These relatively' low costs derive in part from using the $75.8 billion in annual revenues from the carbon tax to lower other Federal taxes.

Since the Senate Finance Committee deals with both international debt and domestic tax policy, it should examine the potential of such energy and pollution taxes as a means of addressing a vital global challenge without adding to either the tax burden or the deficit.

What the Task Force report shows is that there are creative approaches to the challenges of international development and environmental security that are well within our national capabilities and that do not require significant new national sacrifices. I hope this subcommittee and the full Committee will consider the recommendations of the Task Force on both a Multilateral Debt Authority and energy and pollution taxes.

Thank you for this opportunity

PARTNERSHIP FOR SUSTAINABLE DEVELOPMENT:

A New U.S. Agenda For International Development and Environmental Security

REPORT OF AN
Environmental and Energy Study Institute
Task Force

May 1991

Summary

The Four Horsemen of the modern age have been the Cold War and the nuclear arsenals it has spawned, the widespread suppression of human rights, global poverty and hunger, and humanity's unrelenting assault on the environment. In developments of great historical significance, the Cold War is at last winding down, and democracy is rising around the globe. But no comparable progress has been made in reducing world poverty and reversing environmental deterioration.

Nowhere are these problems more acute than in the developing world. One billion people in developing countries live in poverty and hunger. Forty thousand children die daily from causes related to this deprivation. Meanwhile, expanding populations and inappropriate development are destroying the fragile base of soils, water, forests and fisheries on which the future depends. The deserts are advancing while the tropical forests, with their immense wealth of life forms, are in retreat. One and one-half acres of these forests disappear every second; scores of species are committed to extinction every day. Each of these problems is deepened by the addition of almost a billion people to the world's population every decade.

A new era of international cooperation is urgently needed to address these challenges, and the United States should play a major role in bringing it about. The time is ripe for a new U.S. mission internationally, one focused on promoting cooperative action to sustain the earth and its people.

Expanded U.S. cooperation with developing countries should be part of a larger North-South partnership founded on the mutual interests of all countries in economic progress and environmental protection. Leading the way toward such a global partnership for sustainable development is decidedly in the U.S. interest. In a world that is growing ever more interdependent, this country's economic fate is inextricably tied to that of the developing countries. So is the fate of the environmental niche Americans inhabit. The United States can no more keep its climate within the comfort zone without developing countries' cooperation than developing countries can revive their flagging economies and relieve the vicious circle of poverty and resource degradation without America's cooperation.

Given the herculean challenges of the developing countries and the United States' stake in helping to meeting those challenges, our country needs a bold, integrated program to cooperate with and assist developing countries. Unfortunately, the United States lacks such a program. U.S. funding of development assistance has been declining as a proportion of gross national product (GNP) for many years, and serious gaps exist in U.S. policies affecting sustainable development.

It is vitally important to our nation's future that these trends be reversed now and that the United States support initiatives for international cooperation in environment, development and population that match the grave challenges at hand. Major new U.S. initiatives are urgently needed. America's task must be to help stimulate the kind of economic growth that will provide sustainable livelihoods for the poor and to promote concerted actions that conserve the resource base, guard public health, reduce population pressures and mitigate global environmental threats.

Within this framework, our Task Force has developed a broad agenda for U.S. action that we recommend for consideration by the Congress, the administration and the public. Specifically, the Task Force recommends that the United States:

1. Launch a new capacity-building initiative designed to help both low- and middle-income developing countries shift to environmentally and economically sustainable development paths.

2. Support the creation of "sustainable development facilities" within the multilateral development banks to catalyze an increase in the quality and number of projects aimed at conserving natural resources and increasing their productivity.

3. Propose the negotiation of a global partnership to save tropical forests, involving national plans for halting the loss of tropical forests linked to debt reduction and other financial and technological support.

4. Create a multilateral authority to reduce developing country debt — both official and commercial — while promoting policy reforms for sustainable development.

5. Help stabilize world population in the next century at the lowest possible level by sharply increasing U.S. support for meeting the global demand for family planning services.

6. Launch a global initiative to raise the social and economic status of women in developing countries.

7. Urge increased market access for labor-intensive and processed developing country exports in multilateral trade negotiations.

8. Work to make the world trade regime, the General Agreement on Tariffs and Trade (GATT) more responsive to environmental needs and objectives.

9. Adopt strong domestic economic incentives to increase U.S. energy efficiency and reduce U.S. emissions of carbon dioxide and other atmospheric pollutants.

10. Promote the building of a network of centers for training and research on energy efficiency and renewable energy in the developing countries.

11. Create a National Commission on Environment and National Security to reassess "national security" in light of changed political and military conditions and new environmental threats.

12. Establish a high-level body within the federal government to integrate these and other needed initiatives into a coordinated U.S. program of cooperation with developing countries.

Several of these recommendations are relevant to the deliberations leading to the "Earth Summit" — the 1992 United Nations Conference on Environment and Development (UNCED) — and to current international negotiations on various economic and environmental issues. They should be pursued by the United States in these and other appropriate settings as well as through other congressional and presidential actions.

4.

Urge a multilateral authority to reduce developing country debt and promote policy reforms for sustainable development

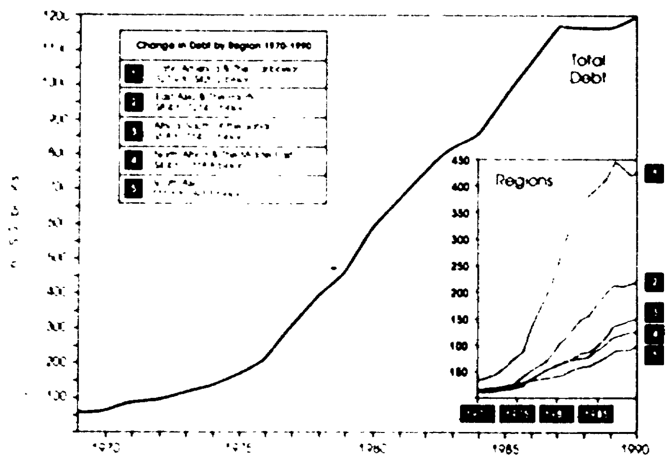
The debt of developing countries, which increased from just over $50 billion in 1970 to $1.2 trillion in 1990, has taken a heavy toll on social and economic development and on the environment and natural resources in many developing countries. (See Figure 2 below.)

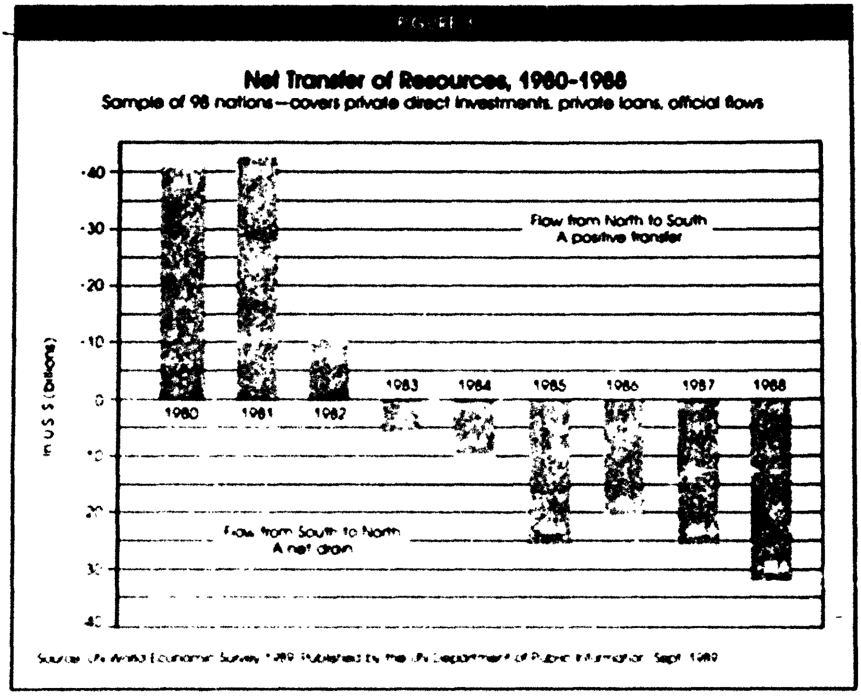
The 1980s was a lost decade for less-developed nations with heavy debt burdens. Because of debt obligations, unprofitable investments, rising interest rates and the drying up of commercial bank loans, the $42.6 billion transferred annually from industrialized to heavily indebted developing countries early in the decade had by 1988 turned into a $32.5 billion transfer from the developing countries to industrialized countries. (See Figure 3 next page.) The result has been stunted economic growth and even contraction. Debtor countries grew at 4 percent annually in the 1960s and 1970s, but their annual growth rates in the 1980s averaged 1.5 to 2 percent — less than their population growth. Because of heavy indebtedness in the region, Latin American countries actually suffered a drop in per capita income of almost 1 percent a year from 1981 to 1990.

To repay their loans, heavily indebted countries have to create trade surpluses

FIGURE 2

Change in Developing Country Indebtedness, 1970-1990





through increased exports, often at the expense of the natural resource base. Limited economic growth and government austerity measures, two consequences of large debt and adverse capital flows, have put more burdens on the poor and placed new strains on soil, water and fuelwood resources. They also have weakened governmental programs that might have promoted conservation and environmental protection.

Meanwhile, the value of developing country debt held by commercial banks has declined rapidly on the secondary market since the early 1980s. The weighted average of the value of Latin American debt had dropped from 64 percent of its original value in 1986 to 28 percent by 1990. Argentina's debt sold for 66 percent of its book value in 1986, and by 1990 was worth only 13 percent of the original value. Brazil's had declined from 74 percent of original value in 1986 to 22 percent by 1990.

The priority that developing countries place on reducing their debt burdens, the linkage between debt and resource degradation in those countries and the growing secondary market in developing country debt all point toward an opportunity for developed countries to use debt reduction to support sustainable development.

Recommendation

The United States should propose that a consortium of aid-giving nations establish an International Debt Management Authority to purchase significant debt obligations of selected countries on the secondary market. The authority would negotiate with the debtor countries in question to forgive those debt obligations gradually over a period of years. In return, the countries in question would adopt policies and initiate programs supporting sustainable development. The authority also could negotiate the forgiveness of official bilateral debt where appropriate.

The International Debt Management Authority recommended here would be very similar to the authority suggested by Congress in the Omnibus Trade and Competitiveness Act of 1988. The major difference would be that the policy reforms required for debt forgiveness would emphasize sustainable development. Depending on the nature of the indebted nation's needs, the policies to be encouraged might include implementation of a national plan to control tropical deforestation, appropriate energy pricing and least-cost energy strategies, a strategy for reducing population growth, land tenure reform, measures to raise the legal, social and economic status of women, and manufacturing strategies emphasizing job creation. Debt would be forgiven progressively over a period of five or more years, on the basis of performance on agreed policy commitments.

The needed policy reforms would have to be supported with special sectoral loans and other support through multilateral development banks and development agencies. For this and other reasons, the authority's activities would have to be closely coordinated with those of other international development institutions.

The cost of such an authority would depend on the scope of the program. Japan, the European Community and other OECD members could be expected to provide 75 to 80 percent of its costs (the same percentage contribution they currently make to bilateral development assistance and the World Bank), while the United States could provide the remainder. Purchase of debt on the secondary market provides a high degree of leverage for the amount invested. For example, the authority could buy $100 billion of developing country commercial bank debt (face value) for about $30 billion at current secondary market prices. If spaced over five years, such purchases would not impose an unmanageable burden on participating countries. In this example, the U.S. share would be $1.2 billion annually.

Despite the U.S. Treasury's decision to reject the plan in the 1988 law for an international debt management authority, the time is ripe for this approach. The United States, through the "Enterprise for the Americas" initiative, has offered some reduction in the official indebtedness to the U.S. government. Moreover, the international loan position of the commercial banks, which at one time were vulnerable to big losses from lending to developing countries, has improved dramatically. Banks now have reserved heavily against these losses and are better able to take them either by disposing of their developing country debt holdings through secondary market sales or by write-offs.

9.

Adopt strong economic incentives to increase U.S. energy efficiency and reduce atmospheric pollution

With only 5 percent of the world's population, the United States consumes 25 percent of the total commercial energy used in the world each year. The amount of energy we require to produce one dollar of GNP is higher than all other OECD countries except Canada.

Some 90 percent of the energy we consume comes from fossil fuels. As a result, the United States is the single largest emitter of the principal greenhouse gas prompting global warming, carbon dioxide, which is released when fossil fuels are burned. (See Figure 4 below.) U.S. emissions of carbon dioxide per person are higher than all other OECD countries except Luxembourg.

The average American consumes 15 times more energy than the average citizen of the developing world. Developing country leaders and opinion-setters are acutely aware of such statistics. Many believe, perhaps correctly, that America's extremely high levels of resource consumption and pollution are the best examples available of unsustainable development.

EPA Administrator William K. Reilly has stated, "We must take action at home that enhances our credibility abroad. ..." But the United States lacks credibility in promoting new energy paths and sustainable development abroad because our own performance on energy conservation at home is so poor. Some developing country officials already have linked their progress on controlling deforestation and U.S. progress on controlling energy consumption.

High U.S. energy consumption is largely a function of energy prices that are extraordinarily low by the standards of the industrial world. The United States has the lowest energy prices of any industrial country, primarily because we have low taxes on energy. In most other OECD countries, gasoline taxes range from two to twelve times greater than those in the United States. (See Figure 5 next page.)

It has been said that the planned economies failed in part because prices did not reflect economic realities. It might just as well be said that the market economies will fail if prices do not reflect ecological realities. Today, in the United States, energy prices do not reflect those realities. As the chairman of the House Committee on Energy and Commerce, Rep. John Dingell, has noted, "The cost of gasoline at the pump, electricity in your home and natural gas at your factories does not reflect its true cost to our nation."

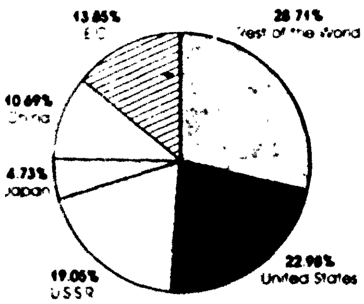
Three countries -- Finland, Sweden and the Netherlands -- have instituted taxes on the carbon content of fossil fuels, and other European countries are considering such taxes, especially in light of the goals adopted by virtually every OECD member except the United States to reduce or stabilize carbon emissions by early in the next century because of their climate-altering potential.

Recommendation

The United States government should adopt energy policies and implementing measures that will achieve major gains in U.S.

FIGURE 4

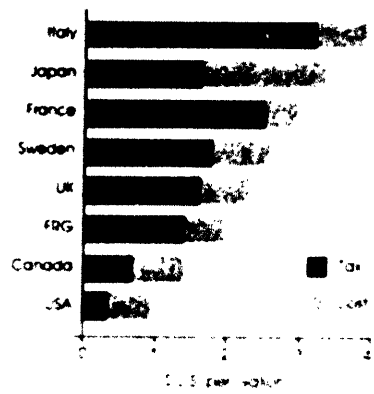
Contributions to Global CO_2 Emissions from Fossil Fuel Use, 1988



Source: World Resources Institute

FIGURE 5

Gasoline Prices in Selected Countries, 1988



energy efficiency and reduce emissions of carbon dioxide and other environmental pollutants. While many initiatives are needed to achieve these goals, the United States should rely heavily on market based approaches such as energy and pollution taxes that make the price of energy more accurately reflect its environmental and security costs. Measures aimed at energy price reform — such as gasoline taxes, a carbon tax and other similar approaches — should be at the center of U.S. energy strategy.

Such a market-based strategy would reduce U.S. emissions of carbon dioxide and several other pollutants, strengthen U.S. energy efficiency, promote renewable and other alternative energy sources, reduce our dependence on imported oil from volatile regions such as the Middle East, and demonstrate good faith efforts by the United States to move to a sustainable energy future. Revenues generated through these taxes or emission fees should be returned to consumers through reductions in income or payroll taxes, though some of the revenues could be used to finance the various initiatives recommended here.

Various studies have indicated that a tax or fee on carbon dioxide emissions would be the most cost-effective policy instrument for these combined objectives. It could be implemented by imposing fees at the point of extraction or import of coal, petroleum and natural gas based on each fuel's carbon content per energy unit. Non-energy uses of fossil fuels would be excluded. Estimates of the costs of carbon taxes based on economic models typically have a built-in bias toward overstatement. They tend not to take into account the economic benefits from enhanced energy efficiency. Even so, a recent study by Dale W. Jorgenson and Peter J. Wilcoxen for EPA has estimated that a $60 per-ton carbon tax could reduce carbon emissions by 20 percent of 1990 levels by 2005 at a cost of 1.6 percent of U.S. GNP. These relatively low costs derive in part from using the $75.8 billion in annual revenues from the carbon tax to lower other federal taxes.

A higher federal gasoline tax, another attractive proposal, would be 12 percent more effective than a carbon tax in reducing U.S. dependence on insecure oil imports, according to a study by William U. Chandler and Andrew K. Nicholls of Pacific Northwest Laboratories. But the carbon tax would be 30 percent more effective than an equivalent gasoline tax in reducing overall national energy demand and also more effective in reducing carbon dioxide emissions.

Significant tax structure changes such as these should be phased in over several years to allow necessary changes requiring major investments and other adjustments.

45-752 (160)