

S. HRG. 109-912

**MULTILATERAL DEVELOPMENT BANKS: DEVELOPMENT EFFECTIVENESS OF INFRASTRUCTURE PROJECTS**

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**HEARING**

BEFORE THE

**COMMITTEE ON FOREIGN RELATIONS  
UNITED STATES SENATE**

ONE HUNDRED NINTH CONGRESS

SECOND SESSION

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**MULTILATERAL DEVELOPMENT BANKS: DEVELOPMENT EFFECTIVENESS OF INFRASTRUCTURE PROJECTS**

**WEDNESDAY, JULY 12, 2006**

U.S. SENATE,  
COMMITTEE ON FOREIGN RELATIONS,  
*Washington, DC.*

The committee met, pursuant to notice, at 9:30 a.m., in room SD-419, Dirksen Senate Office Building, Hon. Richard G. Lugar (chairman of the committee) presiding.

Present: Senators Lugar and Martinez.

**OPENING STATEMENT OF HON. RICHARD G. LUGAR, U.S. SENATOR FROM INDIANA**

The CHAIRMAN. This hearing of the Senate Foreign Relations Committee will come to order.

The committee meets today to continue our review of United States policy toward the multilateral development banks, the MDBs. This is the sixth in a series of MDB hearings that began in 2004. Those earlier hearings contributed to the committee's understanding of both the value of the MDBs' work and the problems with their operations.

These hearings also formed the basis of my MDB reform bill, S. 1129, which was approved unanimously by the committee. Significant portions of the bill became law in November 2005. The legislation contains many reforms aimed at achieving more transparency and accountability in the banks' operations.

The need for oversight did not end with the passage of the MDB reform legislation. The United States has strong national security and humanitarian interests in alleviating poverty and promoting economic progress around the world. The U.S. Government must ensure that the MDB funds are spent well, both because of our responsibility to American taxpayers and because inefficiency and corruption undermine our basic humanitarian and our foreign policy objectives.

The efforts of the Foreign Relations Committee, the Congress as a whole, and the Bush administration, have helped change the terms of debate regarding corruption and its corrosive influence on development. Not long ago, corruption was a taboo topic for international aid agencies and donors. This changed under the World Bank's previous president, James Wolfensohn. His successor, Paul Wolfowitz, has further raised the profile of anticorruption efforts by

reorganizing the Bank's internal integrity unit and suspending several loans because of corruption concerns.

Congress and the Bush administration have highlighted the importance of good governance to economic growth by creating the Millennium Challenge Corporation, which provides extra aid to countries with a strong legal framework to promote honest government and sound economic policies.

Recently, the Foreign Relations Committee held a hearing to review another critical initiative, the U.N. Anticorruption Convention. We heard strong testimony in favor of ratification from the Justice Department, the State Department, the National Foreign Trade Council, and Transparency International. When ratified by the Congress, this treaty will bolster our efforts to fight corruption around the world and help level the playing field for U.S. businesses.

The MDBs themselves are also responding positively. Earlier this year they formed a joint anticorruption working group to coordinate policies and to share information. In March, the Inter-American Development Bank published a strengthened Code of Ethics. Later this summer the European Bank for Reconstruction and Development is expected to issue its first ever anticorruption report.

Fighting corruption is only one aspect of the broader challenge of ensuring that large development infrastructure projects are effective. Critics charge that these projects make few contributions to economic development and poverty alleviation. This is a timely issue because the World Bank and other MDBs have announced plans to increase their infrastructure lending.

Today the committee will focus its oversight effort on two important case studies. The Camisea pipeline project in Peru brings natural gas and gas liquids to the Pacific coast from fields owned by indigenous people in the interior. Financed with the help of the Inter-American Development Bank, the project began operating in 2004. Five spills have occurred in the natural gas liquids pipeline, and some NGOs have complained that local people have not seen the benefits from the gas royalties, a portion of which are earmarked for Peru's military.

In Chad, the World Bank set up a model revenue management program to ensure that money generated by the Chad-Cameroon oil pipeline would be spent for the good of the people, but earlier this year, soon after the pipeline began operating, the Government of Chad unilaterally reneged on its commitment to work under these anticorruption procedures. The government also withdrew its pledge to direct the bulk of the revenue to health, education, and rural development. The World Bank had little choice but to suspend lending to Chad.

To help us examine these issues, we are joined by two distinguished panels. First, we will hear from Mr. Clay Lowery, Assistant Secretary of the Treasury for International Affairs. He will review the U.S. Government's efforts to ensure that MDB projects contribute to the goals of poverty reduction and development.

On the second panel, we will hear from four experts on MDB infrastructure projects. Mr. Jaime Quijandria is an executive director at the World Bank; Mr. Carlos Herrera Descalzi is vice-dean of the National Engineers Association of Peru; Dr. Korinna Horta is a

senior economist for the nonprofit organization, Environmental Defense; and Mr. Manish Bapna is executive director of the Bank Information Center.

We welcome all of our witnesses and look forward to our discussion with them following their testimony. It's a privilege now to call upon you, Secretary Lowery, as our initial witness for your testimony. At the time that Senator Biden, our distinguished ranking member, arrives, I will call upon him for his opening statement.

Mr. Lowery.

**STATEMENT OF HON. CLAY LOWERY, ASSISTANT SECRETARY  
FOR INTERNATIONAL AFFAIRS, DEPARTMENT OF THE  
TREASURY, WASHINGTON, DC**

Mr. LOWERY. Thank you, sir. Chairman Lugar, I'm pleased to have the opportunity to discuss the importance of infrastructure to achieving our shared goal of promoting economic growth and reducing poverty in developing countries.

It was just over 50 years ago that President Dwight Eisenhower signed into law the Federal Aid Highway Act that created today's interstate highway system. Few pieces of legislation have had a more profound and positive effect on our daily lives. It helped spur economic growth, create new jobs, and renew prosperity.

I mention this example to remind us how essential an ingredient infrastructure is for economic productivity, for the delivery of social services, and for regional integration. The countries where the multilateral development banks work, unfortunately, are often lacking this ingredient.

For example, in Cambodia, just 15 percent of the people have access to electricity. In Albania, only 31 percent of the rural population lives within 2 kilometers of an all-season road. In Africa, barely a third of the population has access to improved sanitation, and hundreds of millions of poor people still lack access to affordable clean water. The result is widespread poverty, reduced opportunities for economic growth, rampant disease, and even death.

The multilateral development banks can play a critical role in helping developing countries meet their infrastructure needs. The MDBs engage broadly in this area, providing direct funding, creating the enabling environment to stimulate private investment flows, supporting innovative approaches such as performance-based contracting, putting in place safeguards to address and mitigate adverse social and environmental impacts, and taking steps to reduce corruption.

You mentioned, Mr. Chairman, the cases of Camisea and the Chad-Cameroon pipeline. These are important infrastructure projects for the institutions and for the countries that are involved. Instead of focusing attention solely on these cases, however, which were quite controversial and where there are many problems that need to be addressed, I think it is important to remind ourselves that there are infrastructure development projects that are having an impact on poverty, on helping countries emerge from conflict, and on assisting areas that are vital to U.S. national interests.

For example, in 1998 the World Bank created a small infrastructure project accompanied by technical assistance to local communities that has helped Madagascar increase its delivery of safe

water to 220,000 more people. In Afghanistan, financing by the Asian Development Bank has helped establish a much more reliable telecommunications system.

And today there is a ceremony taking place in Turkey, celebrating the opening of the BTC pipeline. While the EBRD and the IFC played important roles in financing this pipeline, maybe an even more important role was their work in ensuring that affected communities along the right-of-way were consulted in determining areas for the pipeline to avoid, compensation for losses, and local economic development priorities.

I will not sit here and tell you that everything has gone well in the infrastructure sector. I am well aware that many infrastructure projects that are funded by the MDBs, as well as by other sources, have been affected by mismanagement, cost overruns, and outright corruption. The institutions themselves are thinking through the lessons learned, and let me tell you today where the administration is focusing its attention.

First, we conduct regular scrutiny and oversight of MDB projects and policies, including, where we can afford it, conducting site-specific scrutiny.

Second, we strive to set the highest standards across the MDBs in terms of fiduciary control, procurement practices, and environmental and social safeguards.

Third, we must continue to raise the bar on securing results-oriented approaches that build in monitorable, quantifiable targets and benchmarks to measure and track results in MDB-financed projects.

Fourth, we will continue to push that the MDBs work with the countries on establishing dialogs with stakeholders that go beyond the local elites and government to include the poor.

And, finally, the MDBs will need to do a better job in engaging private capital and promoting the market's role in delivering services. To catalyze increased volumes of private capital, the MDBs need to focus countries on improving investment climates, including contract enforcement and regulatory regimes; develop efficient, prudent mechanisms for sharing risk; and help countries build capacity to identify the most productive projects and implement them in a sustainable way.

Mr. Chairman, I applaud this committee, and you in particular, for its careful attention to these important issues, and I look forward to any questions that you may have. Thank you.

[The prepared statement of Mr. Lowery follows:]

PREPARED STATEMENT OF HON. CLAY LOWERY, ASSISTANT SECRETARY FOR INTERNATIONAL AFFAIRS, DEPARTMENT OF THE TREASURY, WASHINGTON, DC

Chairman Lugar, ranking member Biden, members of the committee, I am pleased to have the opportunity to discuss the importance of infrastructure to achieving our shared goal of promoting economic development and reducing poverty. The multilateral development banks (MDBs) have an important role to play in helping developing countries meet this vital need. Theirs is a broad engagement that encompasses direct funding to catalyze other financial flows; creating the enabling environment to stimulate private investment flows, both domestic and foreign; supporting innovative approaches that can be scaled up, if successful; putting in place safeguards to address and mitigate adverse social and environmental impacts; and taking steps to reduce corruption.



## IMPORTANCE OF INFRASTRUCTURE

Infrastructure is essential to economic growth and productivity—it is the fundamental investment backbone for the private sector, essential for delivery of social services, improves regional integration, and is a fundamental jump-start for countries coming out of conflict. As many studies have shown, the economic returns to infrastructure are high. The returns depend on the region and the quality of the infrastructure, but research by the World Bank suggests, for example, that a 10 percent increase in Latin America's infrastructure assets could result in an extra 1.5 percentage points of growth per year. Another World Bank model indicates that if the growth of investment in Africa's infrastructure had equaled that of East Asia during the 1980s and 1990s, the average African would be roughly 30 percent wealthier today. This is a conservative estimate as one specific small scale example demonstrates—an ADB study showed how the establishment of a new road in a Vietnamese village raised the per capita income of the local households by 30 percent between 1993 and 1998.

Infrastructure—whether related to transportation, water supply and sanitation, energy, or communication—is a vital input into private sector development, including small and medium enterprises. This is not unique to the developing world; the dynamism of the U.S. economy is due in large measure to the foresight of investments in such infrastructure basics as the interstate highway system—which is now celebrating its 50th anniversary—and efficient local and regional electric power grids. We often take these for granted, but they are not taken for granted by the poor in countries where clean water and reliable energy are luxuries, if they exist at all.

Infrastructure also is essential to the delivery of social services and human capital development, such as by providing power to health care clinics or to light and heat rural classrooms. Improving access to clean water and sanitation services also affects economic growth and poverty reduction directly by improving health and labor productivity through reductions in water-borne diseases and reducing the amount of time people spend fetching water. According to the World Health Organization, each year roughly 1.7 million lives are lost to unsafe water and inadequate sanitation.

Infrastructure can play an important role in promoting regional integration and entry into the global economy, which is a particularly important development challenge in countries with small labor markets and limited natural resources. Singapore is one example of an economy that has flourished because it put in place the infrastructure needed to become an international trading center, which helped it graduate, long ago, from official development assistance.

Countries emerging from conflict or natural disasters need fast responses to rebuild infrastructure facilities as a starting point for reconstruction of the economy and restoration of basic services. The current government of Afghanistan, for example, recognized that civil war and a legacy of neglect had left the country facing a serious infrastructure shortfall. The MDBs have helped the government to prioritize, design, finance, and implement projects and regulatory systems to overcome this legacy. Despite the substantial challenges, we are already seeing results. Financing from the Asian Development Bank (AsDB) for a private sector cellular phone provider, for example, has led to rapid distribution of telecommunications services that are so reliable that even the United States officials based in Afghanistan use them. Reconstruction of the country's highway network is proceeding steadily, with the AsDB completing a vital road between Kandahar and Spin Boldak, at the Pakistani border, and the World Bank completing roads that are helping to connect Kabul to Tajikistan. Moreover, travel time to go end-to-end on the Kabul-to-Kandahar Highway, which was also financed by USAID, has fallen significantly from 16 hours down to 5 or 6 due to recent improvements in road conditions. These roads help get goods to market and provide the basic infrastructure that will allow Afghanistan to achieve its vision of becoming a land bridge connecting Central and South Asia.

## INFRASTRUCTURE NEEDS

Infrastructure needs in both low-income and emerging market economies are vast. While calculations vary, even the lower-end estimates by the World Bank suggest that developing countries need to devote around 5.5 percent of GDP to infrastructure investment, which is well above the average level of investment in the sector, currently around 3.5 percent of GDP. The under-investment reflects not only declining official assistance flows (recently reversed by most of the MDBs), but more importantly investment climates considered inhospitable by many private sector investors.

The United States has encouraged increased attention to infrastructure by the multilateral development banks (MDBs) recognizing that developing countries' needs were not being met and that investment flows from the private sector were declining, particularly in the wake of the Asian financial crisis. In 2003, the World Bank adopted an Infrastructure Action Plan that has scaled up infrastructure investments, expanded the range of instruments and funding sources, and catalyzed private resources. Other MDBs, with United States' urging, are creating special funding facilities, such as the Infrastructure Facility of the Americas at the Inter-American Development Bank and the Infrastructure Consortium for Africa established at the African Development Bank. The Asian Development Bank has expanded its infrastructure lending in the last few years, primarily in energy, water supply and management, rural transport, and telecommunications. The EBRD has important initiatives in power and energy, municipal and environmental infrastructure, transport, and telecoms.

In addition to providing direct financing (loans, grants, equity, and guarantees to mitigate risk), the MDBs support infrastructure development by strengthening the policy and regulatory framework, giving analytical and diagnostic support—such as investment climate assessments and country infrastructure studies—and building institutional capacity to manage infrastructure investments. It is also critical that the MDBs do more—directly and indirectly—to attract both foreign and domestic private-sector investment in critical infrastructure.

#### SUCCESSFUL PROJECTS AND INNOVATIVE APPROACHES

Much is known about the controversial projects which the MDBs have helped finance and which have commanded a great deal of U.S. officials' time and resources. However, to focus exclusively on these operations is to overlook a substantially greater portion of projects that are likewise having a positive impact on economic activity and social well-being. Let me use this opportunity to highlight examples where MDBs have supported innovative infrastructure proposals and projects that meet pressing public needs.

- The AfDB is helping the countries of Senegal and Mali to complete the missing road links between Bamako and Dakar, and thereby reduce transport costs and promote further economic integration between the two countries and their neighbors. The project aims, by 2010, to reduce the amount of time for goods removal at the Dakar port from 7 to 2 days; to reduce the border crossing time from 1 day to 2 hours; and to reduce the distance to fetch water from 5 km to less than 1 km. The project will also be partially financed by private transport sector operators in Senegal and Mali.
- The World Bank has helped to complete a network of water and sanitation services in Ahmedabad, India, that has increased the daily profits from vegetable farming by women living and working in local slums, and has sharply reduced the incidence of disease. A World Bank water supply and sanitation project in Uttar Pradesh empowers local communities to make design choices and procure goods and services.
- The IFC has made a number of investments in locally owned firms, such as Celtel, a cellular telephone company operating in Africa that subsequently witnessed remarkable success. Within 7 years of starting up operations, Celtel grew to operating in 14 countries and serving around 9 million subscribers.
- In the Kyrgyz Republic, the EBRD is working with a state-owned joint-stock power company to improve the efficiency and reliability of electric power transmission and distribution in the Talas region, as well as to support private involvement in power and improve collection and reduce commercial losses. It is an important step toward private management of power distribution for the first time in the Central Asian region.

This is just a sampling; there are many other infrastructure projects that I could cite.

#### THE WAY FORWARD

I will not sit here and tell you that everything has gone well in this sector. I am well aware that many infrastructure projects—those funded by the MDBs as well as by other sources—have been affected by mismanagement, cost overruns, and outright corruption. The World Bank recently produced a lessons learned paper in which it identified a number of common issues that prevented it from achieving better results on its infrastructure engagements. The main culprits included inappropriate project design, delays in addressing access for the poor, insufficient management of expectations of private sector participation, late recognition of the importance of environmental and social sustainability, a lag in addressing corruption

issues, and weaknesses in communications with stakeholders. When these things happen, infrastructure investments become enduring reminders of these inefficiencies, and send a negative signal to both donors and the private sector. These are important lessons and as the largest shareholder in the MDBs, we will continue to work to see that these lessons are reflected in the bank's operations going forward.

First, we will work to enhance the application of proper safeguards, to offset or reverse the problems through regular scrutiny and oversight of MDB projects and policies—including, where we can afford it, to conduct site specific scrutiny.

Second, we strive to set the highest standards across the MDBs, in terms of fiduciary controls, procurement practices, and environmental and social safeguards. As I said in my remarks on anticorruption to this committee in March of this year, Treasury is advancing a comprehensive reform agenda at the MDBs to attack corruption around the world and to root out corruption within the MDBs. Particularly germane to the infrastructure sector is sound revenue management. Through our interventions, we have secured key policy and project-related reforms, such as the transparent accounting and reporting of project-related revenue flows to make sure that these projects are accountable. For example, following strong U.S. leadership, the International Development Association (IDA) agreed to require that financial assistance for any project with a significant impact on revenues should be predicated upon the government having in place a functioning system for accounting for revenues and expenditures. We will continue to work to ensure that public disclosure by MDBs is the norm.

Third, we must continue to raise the bar on securing results-oriented approaches that build in monitorable targets and benchmarks to measure and track results in MDB-financed projects. We have seen progress in this regard: Now all of the MDBs are producing results measurement frameworks for their on-the-ground investments. We will closely monitor a new pilot project by the World Bank to strengthen the risk profile of infrastructure projects during the design phase and develop benchmarks and indicators that will trigger needed remedial action during project implementation.

Fourth, one of the lessons from experience is that access for the poor raises a distinct set of issues for project preparation and implementation. This requires dialog with shareholders that goes beyond the local elites and government to include the poor. Access for the poor also requires new approaches for structuring projects. One potential approach that is being used is output-based aid. This model uses targeted subsidies for reducing service costs for the poor while allowing private infrastructure providers to pursue cost recovery. In Cambodia, for example, private service providers were selected on a competitive basis to roll out water and sanitation services to villages. To make sure that this did not exclude the poorest inhabitants, who otherwise might not have enough money to pay the up-front costs of getting hooked up to the system, an incentive payment was provided directly to the service provider for each eligible poor family that was connected to the network.

Finally, but no less importantly, the MDBs will need to do a better job in engaging private capital and promoting the market's role in delivering services. Because official development assistance provides only around 5 to 10 percent of current spending on infrastructure, the MDBs' engagement will need to demonstrate both selectivity and "additionality." By "additionality," I mean that the MDBs have to bring something to the table that the host country or private sources cannot or will not. And where the banks do engage, they should demonstrate that they are picking high-impact projects. Until 1997, there was a steadily increasing appetite by the private sector for investing in developing country infrastructure sectors. The Asian financial crisis and several high-profile project failures have cut those private flows in half, but this trend can be reversed with the right policy and regulatory framework and with assistance to help countries develop bankable projects.

Given the vast infrastructure needs and the shortage of public and official finance, the international financial institutions need to find effective ways of unlocking private investment flows by addressing specific market failures. We firmly believe that innovative proposals can employ small amounts of official finance to catalyze orders of magnitude more in private investment. That's the kind of leveraging of public money we like to see. As one example, we know that private investors often have a hard time obtaining information on which infrastructure proposals make economic sense and which are largely driven by politics. We have developed an innovative initiative in the IDB; targeting official money to reduce investors' search costs for good projects that gets at precisely this problem.

If the MDBs are to catalyze increased volumes of private capital, they will need to (1) address the regulatory regime obstacles so that investors have a degree of certainty and a clear path for cost-recovery; (2) promote realistic expectations about the benefits of private capital; and (3) seek new mechanisms such as output-based aid

and public-private partnerships that address the sustainability of private infrastructure services. We are committed to working with the banks to help countries put in place this framework.

In closing, I welcome your interest in this very important aspect of the work of the multilateral development banks and I look forward to your questions.

The CHAIRMAN. Thank you very much, Secretary Lowery.

Let me just begin with a general overview question. Infrastructure can be an important investment to reduce poverty in developing countries, particularly infrastructure that allows people access to energy, water, communications, and transportation. However, the committee has become aware of investments in infrastructure that unfortunately diverted resources from the needy and caused negative impacts on the poor. The revenues apparently were not put to the best use.

Now, as the MDBs are supported by taxpayer dollars from donor countries, their projects are expected to reduce poverty and improve growth in the developing world. In your judgment, are the MDB banks carefully evaluating infrastructure projects based on their development impact from the beginning of consideration, as well as through the working out of the projects?

Mr. LOWERY. My belief is that the MDBs, to a large extent, do exactly what you just asked if they did. They try very hard to figure out how these infrastructure projects are going to actually help the people of these countries.

There are times when we have concerns that the MDBs might be moving in a way that is too fast, or the incentives are wrong. The incentives sometimes can be to actually "let's get a project on or a program financed," as opposed to "let's see what results we're actually going to achieve with those programs."

We have tried to focus our attention on—our voice and arguments have basically been toward making project selection much more targeted and selective based on performance in terms of policies. We've tried to make sure that the MDBs are striving to have the best environmental, social safeguards, as well as procurement and fiduciary standards. And, finally, we have tried to really focus on measuring the results of these things.

That said, there are going to be mistakes made. This is a very, very risky business, and we just need to correct those mistakes when they happen.

The CHAIRMAN. In your continuing analysis of these projects, have you developed metrics that offer you some basis of comparing results? In other words, these are always clearly value judgments, but after you have been through a good number of them, there may be some characteristics that lead you to have some standards.

Mr. LOWERY. I think that it's a good question. The metrics that we try to look at are—first of all we try to look at the broad, macro picture in terms of macroeconomics but also microeconomics. What are the countries doing to actually try to reduce problems in their policy environment? That's the first metric we look at, and there are a number of indicators that go with that.

Second, I think, is to try to look at more specifics in terms of the actual projects themselves. Are the results' frameworks being put in at the front that are monitorable and quantifiable, or are they basically kind of things like, "Well, we seek to do something,"

which is kind of amorphous and you're not really sure what they're trying to do. So that's something that we focus very hard on.

In fact, just the other day there was a loan in the Inter-American Development Bank which was a loan for very good purposes, and it was going to help a country that's important to the United States. And we were very concerned that the measuring results agenda wasn't there, that we weren't sure what was going to actually be achieved.

And actually, to the IDB management's credit and their staff's credit, they actually went back and tried to find us more metrics about how they were going to—it was a competitive loan, so how were they going to reduce the days in terms of red tape and bureaucracy that was involved, so that basically we could actually find out whether or not we're actually achieving something with this loan, or is it just money into a budget?

The CHAIRMAN. I like your expression of these metrics up front to begin with, that you look for some indication there, as opposed to an editorial after it's all over. Some good things happened, but not necessarily either anticipated or planned.

Mr. LOWERY. Right.

The CHAIRMAN. Now, a number of the infrastructure projects focused on energy generate revenue for the developing country, rather than improving the overall infrastructure of the country. Now, if the infrastructure project's main development impact is revenue generation, what can be done to ensure that those revenues are used for development?

Mr. LOWERY. I think that there's a variety of different things that the MDBs try to do. The first is probably just a broader perspective of the MDBs, actually, and the IMF on this one, work to help increase the transparency of the budget so that we actually have a better understanding of where the money is going, and more importantly that the people of the country have a better understanding of where the budget is going.

And second is, the MDBs work on capacity-building within the governments themselves, so that they have the capacity to handle these resources in a more effective way and that they can put in controls.

And third, in some projects, and this is more case-by-case, we look and see if there are mechanisms that can be set up, such as the Chad-Cameroon pipeline, which has had some problems, but one thing that has been set up was an oversight committee called a college. The college actually is made up of NGOs. The chairman of the college is actually the opposition leader. And Treasury actually has provided technical assistance to the college on budget transparency.

The college is basically looking at the revenues that are flowing toward a certain portion of the Chad-Cameroon pipeline, to see if they're going toward health projects, education projects, and basic infrastructure. And the college has actually said at times things are working, but at times there have been problems. But in the past, there's a good chance we would not have known that, but now we do because of this mechanism that was set up. So it's kind of we try to do it on a variety of different levels.

The CHAIRMAN. Well, the transparency idea that you have expressed, I think, is tremendously important. I was in Baku last August, at the beginning of the bubbling of oil through the Baku-Ceyhan pipeline, and had a visit with President Aliyev of the country. He pledged to be very transparent from the beginning about the revenues coming to his country, so we welcome that. I hope to return this year and take another look, and President Aliyev, in fairness, has come to our country, and had a visit here within the last 2 months.

But this is a very important issue, and this is not a project of the MDBs. This is by and large investment by British Petroleum and a large consortium, including some oil firms from our country. But at the same time, the principle is the same, in terms of what is going to occur in that country with regard to schools and houses and roads and so forth.

Mr. LOWERY. I agree with you completely, and as I mentioned, the IFC and the EBRD actually were helping on the financing of that project. In terms of President Aliyev's commitment, I know that our State Department has been working very closely with them on kind of a transparency initiative because of energy, to basically capture what's actually happening with energy revenues and what's happening on the other side of the equation, energy expenditures—or not energy expenditures, budget expenditures.

The CHAIRMAN. Well, I look forward to working with you and State Department officials prior to our visit this time, so we all are on the same page asking questions, because this is an important policy for us.

Let me note that, as you mention in your statement, the January 30, 2006 World Bank publication entitled "Scaling Up Infrastructure: Building on Strength, Learning From Mistakes" identified a number of lessons learned. Now, how are these lessons being integrated proactively in World Bank projects, in your judgment? And how are those lessons being integrated into the infrastructure projects, particularly finance, by other multilateral development banks?

Mr. LOWERY. I think that the World Bank has looked through—I mean, they just came out with a paper in February, but I think that some of the lessons they have been learning, the way they have explained it to me at least is, in the past when they were looking at corruption issues and infrastructure, they were looking at them from the big, overall, macro perspective, and sometimes from a project level.

But they have said that what they have to look at more is how do you look at it in a sector, a particular sector, whether it's energy or transportation or telecommunication? So they are actually trying—that's one of the things that they right now are saying admittedly that they have to work on. So we are looking forward to seeing more from them there.

They are also trying to figure out how to work much more up front the environmental and social issues into the project design of the program. And one of the problems that sometimes happens is, the project design has happened and it has happened from a much more technical perspective, and because of that we get to a situation later down the road where nobody had thought through the

environmental issues, or they had thought through them but kind of after the fact.

And I think that the World Bank is trying to move that much more up front, and they're doing it through their own management structural changes without trying to harm, I think, like overall compliance, as to whether or not they're following their policies and things like that.

So I think that those are a couple of things that they have told us that they're working on, but the proof will be in the pudding, as usual.

The CHAIRMAN. Looking ahead to the work of our second panel, what does the administration expect the IDB to do once the results have been received from the social and environmental audit of the first phase of the Camisea project? How can the IDB ensure that the audits lead to lessons implemented and not simply lessons observed?

Mr. LOWERY. Well, I think that there have been some lessons learned that need to be thought about very carefully on the Camisea project. When we looked at Camisea back in 2002-03, we were very concerned—we, the administration, were very concerned that the IDB was coming into this very late in the game. And the problem with that is—there is probably a threefold problem.

First, the IDB's role is to catalyze private sector investment. It is not to fill a financing gap because the private sector investors ran out of money. So we're concerned about that.

Second, because it was late in the game, they were not as involved in some of the project design work, and so they didn't have some of the environmental and social safeguards that probably they would have had in some of the other IDB projects.

And third is that it's important to work on building capacity within the countries, in their municipalities and their communities, and I think that the IDB does a pretty good job on that but they've got to get started early because that's a very difficult issue to tackle.

So we think that those are some lessons learned. I mean, in fact it's the reasons why we were the only country that actually did not support the Camisea project back in 2003, and we were alone, and obviously there have been some problems since then.

But I think that in terms of going forward, first of all, we know that Camisea is a very important project to Peru. It's helping the country reduce energy costs, providing jobs, and it could be very important for Peru's economy.

We think that the IDB, working with the Peruvian Government and the communities, needs to work to solve the problems that have been cropping up with Camisea I, and then with Camisea II they need to take into account the lessons that they have learned. And I think they're trying to do that by basically working right now with the Peruvians, which is much earlier in the process than was the case in Camisea I.

As to how the United States will vote or look at that, we haven't actually made a decision. I mean, what we have to weigh is a variety of factors. We have to weigh the development benefits that could accrue to Peru and the Peruvian citizenry. We have to look at overall policies that we have toward the Inter-American Devel-

opment Bank. We have to look at the environmental and social safeguards, as well as the fiduciary controls and some of the revenue management issues you had mentioned earlier. And we'll weigh those factors, as we did back in 2003, and then we'll figure out what to do.

I know that the IDB is looking very carefully. President Moreno has been deeply involved. I think he was just in Peru, talking to them about this issue. And I know that President Toledo and President Garcia have talked about setting up some sort of oversight committee on this, so the Peruvian Government is also aware that this has been a problem and they've got to fix it.

The CHAIRMAN. I thank you for that response. Let me just say that I will add into the record of the hearing a letter that I received from the Ambassador of Peru to the United States, in which he strongly endorses the results of what has been occurring, complete with an annex of benefits of the project, so that that will be a part of the record and his testimony in that form. [This information appears in the Additional Materials Submitted for the Record section.]

Let me ask, does the experience of the Inter-American Development Bank with the Camisea project show that the organization has the capacity to monitor compliance with its own policies? And what is the United States recommending regarding this question, with regard to the pending reorganization of the IDB proposed by President Moreno? Given the experience of the Camisea project, what concern does the administration have regarding IDB's intent to increase private sector and infrastructure financing?

Mr. LOWERY. I think that the IDB does have fairly significant resources in terms of environmental and social compliance issues. I think that where they probably made some mistakes in Camisea, I was underestimating how much it would actually take because of how big this project really was, and how big a role they were having to play with the Peruvian Government and with the communities. I would think that the IDB has learned some lessons from that, and will work with them on those issues, both resource and policy issues.

The role of the private sector is actually vital. I mean, in the end, what we want to see happen is these MDBs put themselves out of business, and the only way you're going to do that is to basically create the right types of environment to actually get private sector flows and investment capital coming.

And I think that that was the hope in the 1990s, and you saw a dip in how much was going toward infrastructure from the MDBs, and a lot of that—I mean, there were a variety of reasons for that, but one of the reasons I think was they thought that private sector capital was going to start flowing better, and basically that didn't happen, and so they had to ramp up their ability to put in more.

But I think it's very important that the IDB work with the private sector and do a better job. I mean, this is probably our number one priority at the IDB. We have talked very extensively with President Moreno and with his top staff on the United States really wants to see the IDB moving more toward how do you influence the environment so that the private sector can play a much more



extensive role, whether it's in infrastructure projects or small and medium enterprise development.

The CHAIRMAN. On the second item, why did the World Bank suspend new loans and grants to Chad in January 2006? Why did it resume lending to Chad in April 2006? What criteria does the World Bank use to decide when to cease funding to a country, and what action, if any, is our administration pushing the World Bank to take with regard to the revenues generated from the Chad-Cameroon pipeline?

Mr. LOWERY. The Government of Chad and the World Bank were having an argument back in 2005. The Government of Chad believed that it needed to use more of the resources that were coming from the revenues for the here and now, as opposed to for the future. There was a portion of the revenues, 10 percent, that was going to something called the Fund for the Future, basically a rainy day fund, when the oil runs out.

And I think that what the Chadian Government was saying is, "Look, we're really poor and we need the money now." That's kind of the good way of looking at it. There might have been problematic ways of looking at it as well. I think the World Bank was saying, "Well, we had a deal and we need to kind of work on that deal." And I think frankly communications broke down between the two.

And then in December—I believe it was December, maybe it was November—the Chadian Government, the parliament basically said, "We're just going to overturn this deal." And so at that point in time the World Bank was basically stuck with a gun to its head, in a metaphorical sense, and basically you can't negotiate that way. So they basically said, "Fine, we're going to stop the funds at the escrow account. We're going to cut off new lending, and we're going to stop disbursements on our pipeline."

Since that time, Chad and the World Bank have conducted a series of negotiations, both here—well, actually here, in Chad, and in France—to try to work out these agreements. And in April they created an interim agreement in which there would be traunched money coming out of the escrow account, but the percentages would change around a bit, but there would still be oversight of the college.

We have basically been supportive of where the World Bank has been, but we've obviously listened very carefully to what Chad has been saying, because we wanted to get their perspective on this thing. They are trying to work out a more permanent solution in which, my guess is, there will be some renegotiation of how these funds will flow.

And also the World Bank is trying to look at what has become a different issue which actually wasn't foreseen back in 1999–2000, which was the tax revenues that would actually come in from this account, because at the time oil was \$15 a barrel. It's now \$75 a barrel. There's a lot more coming in, and I think that the World Bank is trying to figure out what to do with that, because that's obviously going to go into the Chadian Government's coffers. And the idea is again, budget transparency, capacity so that we and the people of Chad actually have an understanding of what's going on with this money.

So that's kind of how we've been looking at it. We've tried to help, in basically working with the World Bank and working with Chad, and we've tried to help in a different way, which is providing technical assistance to this civil society group, that college that oversees kind of some of the funding.

The CHAIRMAN. On that issue of the civil society groups, their claim is that several years ago they warned about problems with World Bank plans for the pipeline, and they claim that their warnings were ignored. In the workings of the World Bank, or, for that matter, the other development banks, to what extent is attention paid to civil society groups as opposed to governmental officials?

Mr. LOWERY. Well, I think that the World Bank obviously is more used to working with governments. I mean, that's what they do, so they will pay a lot more—they pay attention to governments, but they clearly do listen to civil society groups and to communities as to what is going to be effective.

And I think if we look back at Chad-Cameroon, the World Bank's role from a financial perspective is tiny. It's not much of the overall financial structure. But their role in terms of setting up some of these groups, about where the money is going, the environmental safeguards, the World Bank played a crucial role in that, and that included working with civil society.

I'm sure that there are some civil society groups that are disappointed in what happened, but the reason we know about what's going on with some of the money in Chad is not because of the United States people. It's not because of people in Europe. It's because of people in Chad, and that's because of civil society groups that are working in this college. I mean, the World Bank deserves some credit for helping set that type of system up.

The CHAIRMAN. We thank you.

Senator Martinez, do you have questions for our witness?

Senator MARTINEZ. Mr. Chairman, thank you very much. I know that you've covered extensively the Camisea project, which was one that interested me. And I won't go over that again except to ask the role, Mr. Lowery, that the—back on the issue of NGOs or civil society, as you were just discussing—have they in this particular instance been involved? What role have they played? And have they been a force in advancing the project and in allowing it to go forward? I also know there have been environmental concerns, and perhaps you can touch on that as well, and the role that the NGOs and the environmental groups have played in that particular project.

Mr. LOWERY. The NGOs—some of the NGOs were extremely concerned about this project back in the 2002–03 time frame. They were very worried that the project sponsors and the Government of Peru was not paying enough attention to environmental controls and erosion control, and to the actual fractionization plant that was put into something that was very close to a Ramsar site, which is something that the international NGOs care deeply about. And at the same time they also wanted to be involved in how, if you're going to do this and you're going to affect these communities, what is going to happen with the flows, and what is going to happen to these communities and how do they have a chance to argue their point of view?

The IDB came in and, again, the United States did not support this program in the IDB because of some of these concerns, actually. But the IDB did try to play a better role in getting an ombudsman involved and trying to help some of the indigenous people about how they work with the country and work with the project sponsors. They have actually helped set up a—some of the funds go toward the local groups.

And I think that what the IDB is still trying to do is work with these NGOs on how you set up a better way of compensating some of the people that have been affected by this project, and particularly in terms of some of these spills that have happened. So the NGOs have been actually very involved, and I think the IDB has worked closely with them. I think some of the project sponsors have, as well. Obviously it's not a monolithic creature. I mean, some NGOs have different views than others.

But we are of the view that Camisea has not been a success. I mean, we are of the view that it could have been better designed, it could have been—working with the NGOs could have been probably better handled, and the civil society groups. But at the same time it is an important project for Peru, and we're hopeful that given some of the lessons learned, that can be improved upon in the future.

Senator MARTINEZ. Anything else on that? Just the issue in general—and again I apologize if it has been covered—but the issue of corruption and the issue of transparency, would you touch on that in terms of the importance of avoiding those pitfalls and what you're doing in order to prevent the resources not going to the intended purposes, as I know so often in the history of our efforts, unfortunately the amount put in gets diminished by the amount that unfortunately doesn't end up in the right places.

Mr. LOWERY. I think that in terms of corruption, I mean, that is one of the key issues that we need to worry about, not just infrastructure projects, but all projects and all programs. Some of the times it's in budget support.

We think that it's best handled in a variety of ways, first at probably the institutional level, which is we want the multilateral development banks to police themselves. They need to—you know, Paul Wolfowitz has been talking about this very well, and actually some of the other presidents in the MDBs, as the chairman mentioned in his opening statement.

But then at the country level, I mean, what we have tried to do is help build up capacity; work with countries that are frankly implementing some better policies, and that's why we talk a lot about what we call performance-based allocation systems; and then working with the countries and working with the project sponsors on the actual project level. How do you set up mechanisms so that you have sound fiduciary measures, good procurement practices that meet best standards, and sometimes setting up mechanisms, depending on the case, on actual oversight of the funds, as was the case in Chad-Cameroon.

That doesn't mean that we're going to catch it all, but I think that the thing is to try to squeeze as much of the corruption and the problems out of the system as you possibly can. And I would say it's probably one of the top three or four priorities we have at

the Treasury on how to deal with the multilateral development banks.

Senator MARTINEZ. Thank you, Mr. Chairman, and thank you, Mr. Lowery.

The CHAIRMAN. Thank you very much, Senator Martinez. And I join the Senator in thanking you, Secretary Lowery, for your initial statement and your responses to our questions.

I will now call on the second panel for our hearing today, and this will include the Honorable Jaime Quijandria, executive director at the World Bank; the Honorable Carlos Herrera Descalzi, former Minister of Energy and Mines, vice-dean of the National Engineers Association of Peru, from Lima, Peru; Dr. Korinna Horta, senior economist, Environmental Defense, Washington, DC.; and Mr. Manish Bapna, executive director, Bank Information Center, Washington, DC.

We welcome this distinguished panel and look forward to hearing from each one of you. Let me say at the outset that your complete prepared statements will be made a part of the record, and you need not ask for this to occur. It will occur. We will ask that you either use those statements in their entirety or summarize, as the case may be, and I will ask you to testify in the order that I introduced you. This literally will be—let me just make certain I see where everybody has been placed—but first of all we will hear from the Honorable Jaime Quijandria, and then we will hear from the Honorable Herrera Descalzi, then Dr. Horta and Mr. Bapna, in that order. Would you please proceed.

**STATEMENT OF HON. JAIME QUIJANDRIA, EXECUTIVE DIRECTOR, THE WORLD BANK, FORMER MINISTER OF ENERGY AND MINES OF PERU**

Mr. QUIJANDRIA. Thank you, Mr. Chairman, members of this committee, I am really honored and I want to thank you for this invitation to discuss this relevant aspect of the activities of multilateral development banks.

As you probably know, Mr. Chairman, I was engaged with the project Camisea during 3½ years. I was Minister of Energy and Mines and Minister of Finance for a short period between July 2001 and November 2004, during Toledo's administration. It was during that period that the Camisea project was implemented in Peru. As you also mentioned, I represent Peru and another five South American countries, at the board of the World Bank, but I would like to clarify that my opinions on the subject in question compromise neither the Bank nor the Government of Peru. I am here as an energy policy practitioner, and I'm really delighted to share my experience.

Camisea has been probably the most important example of policy continuity. The concept, the design, and the international bidding process took place during Fujimori's administration. The contract was signed during President Paniagua's administration. The construction took place during President Toledo's administration, and now president-elect Garcia has mentioned that he gives high priority to this project. I think that in the fairly unstable institutional framework that we have in our country, this symbol of continuity

is an exception. We have had very few cases in our history where they have had this kind of consensus.

Camisea was the biggest and most complex project ever in the history of Peru. That is why, when we assess its impact, both positive and negative, it's necessary to take a wide approach and remember what were the objectives of the project and probably what have been some effects, desired and not desired, of this project.

After 2 years of operation, we clearly have the picture. It has increased gross national product by 1 percent, and is going to continue increasing national product for 30 years. Fiscal revenues have increased or are going to be increased \$1.4 billion, which is 90 percent of the total revenues of the country. An annual reduction of \$500 million in fuel trade deficit has been made, and we are already still with a negative balance of trade.

An average 30 percent reduction in electricity rates has been produced by the project, and obviously this reduction has benefited the poorest. New permanent jobs numbering 7,200 have been created, along with 15,000 temporary jobs.

I want to stress very much that by law 50 percent of the royalties of this project and any other hydrocarbon project goes straight to the region, and that is very important because Camisea has produced a lot of revenues for the country and for the regions. And, second, a specific fund has been created to finance projects in Huancavelica, Cuzco, and Ayacucho, which is probably the area where the poorest population of Peru is concentrated.

I call to your attention that 48 percent of the population of Peru live under the line of poverty, so Camisea has probably been a step in the right direction. It has benefited the poor, but in order to decrease poverty to the levels any government intended to, we probably need 10 or 20 Camiseas. It's not probably one single project that is going to solve this long national problem.

We have mentioned in our statement some recommendations in order to improve both the operation of the government, IDB, NGOs, and companies involved in order to do the second stage of the project, if that is the case, in a probably better environment and probably giving room for all the lessons we have learned.

As to the transparency of resources that have been received from the project, I want to make very clear that allegations that sums from Camisea have been taken to finance the Minister of Defense or other purposes, too, 50 percent of the revenues are going to the provinces and to the municipalities. There is an additional fund which takes 18 percent from the revenues of Camisea which goes specifically for three areas where the pipeline goes.

So from the remaining part, which is property of the treasury, from the remaining parts some funds have been derived to the defense, not to buy arms. Probably it's part of the security situation of the country. As you probably know, Mr. Chairman, we had a tremendous guerrilla movement in the country not long ago, so there are still problems of security. And as money is fungible, we have given a very clear, a good example of how to finance our expenses, so there is going to be additional room to increase the funds of the Camisea fund.

But in the last analysis, the problem now with Camisea and the population living there is not lack of resources. It's capacity to im-

plement projects, capacity to design projects, and capacity to expend the money they have already received. Camisea has already collected \$254 million in royalties for the region, and something like \$38 million for the specific FOCAM fund which is going exactly to the three specific regions.

And the problem is that local authorities are not familiar with the design of projects, with the execution, the approval of projects. Governments, IDB, NGOs, we have to help those local authorities, in order to enable them to have good projects and to have them in the shortest period of time, because this is again what we expect from the project.

I would like to finalize this introductory statement going probably beyond the scope of the questionnaire that you were kind to send me. The committee's concern about the role of multilateral development banks in financing big infrastructure projects, particularly energy sector projects, coincides with the discussion of the financing of extractive industries that took place at the World Bank board of directors during the last 2 years.

During these discussions, in which governments, private companies, NGOs, and the academic world participated, maximalist positions were presented, such as the withdrawal of multilateral organizations from the financing of these industries. Fortunately, the final consensus was reached on the need to continue and increase the financial support to this project, but at the same time to incorporate highest environment and social standards when assessing these projects.

On the other hand, there is ample empirical evidence provided by the World Bank and the Inter-American Development Bank showing that there is a high correlation—you have mentioned that, Mr. Chairman—between the investment in infrastructure and growth of the GNP. Moreover, considering the deficit in infrastructure in Latin America, especially in energy infrastructure, a recent study by the World Bank shows that if the region had increased its level of investment in infrastructure to equal those reached in the Asian region in the last 20 years, its GNP would have gone up 2 percentage points on average.

In the case of the Camisea project, out of the total investment required for the implementation of the first phase, which went up to \$1.6 billion, totally financed with private sector, the Inter-American Bank contributed with \$75 million for the construction of the gas pipeline. Even if the Inter-American Development Bank, at the request of some NGOs not in agreement with Camisea, had decided not to participate in the financing, the project would still have been carried out.

For this reason, I clearly support the engagement of international financial institutions in infrastructure projects, particularly energy-related ones. The design and the evaluation of projects, especially those on social and environmental matters, will benefit from the lessons learned by this institution.

To conclude, Mr. Chairman, I agree with the statement of Domingo Cavallo, ex-Minister of Finance of Argentina, before this Committee on Energy Security. I am quoting him: "South America's self-sufficiency in terms of energy has been deteriorating as a result of populist policies and short-term objectives." In this sense,

Camisea, with its second phase about to start, represents a step in the right direction and, depending on the magnitude of reserves we are able to discover and exploit, will contribute to the security of South America and eventually to the whole hemisphere.

Thank you.

[The prepared statement of Mr. Quijandria follows:]

PREPARED STATEMENT OF HON. JAIME QUIJANDRIA, EXECUTIVE DIRECTOR, THE  
WORLD BANK, FORMER MINISTER OF ENERGY AND MINES OF PERU

Mr. Chairman, members of this committee, thank you for inviting me to discuss this relevant aspect of the activities of multilateral development banks.

First, let me start with a brief comment on my experience concerning the main subject of this hearing. Over the last 15 years, I have been involved with energy issues and different ways of financing energy-related projects. During this period, I held high-level positions, both in the public sector (chairman of the state-owned petroleum company Petroperu) and the private sector (chairman of the YPF's Peruvian subsidiary). I was also engaged in energy policy issues as I was Minister of Energy and Mines and Minister of Economy and Finance from July 2001 to November 2004, during President Toledo's government. It was during this period that the Camisea project was implemented in Peru.

At present, I represent Peru and five other South American countries as executive director at the board of the World Bank.

In spite of what I have just stated, I would like to clarify that my opinions on the subject in question compromise neither the bank nor the Government of Peru.

I will now address the questions submitted by this committee in Mr. Chairman's kind letter of July 6, 2006, inviting me to this hearing.

Camisea was the biggest and most complex project in the history of Peru. That is why when assessing its impacts, both positive and negative, it is necessary to take a wide approach and remember the economic situation, and the situation of the energy sector, in the year 2000. Although Peru has significant reserves of natural gas discovered by Shell in 1984, due to a lack of political consensus on the most appropriate way to give value to this source of energy, the country was dangerously more and more dependent on over \$1 billion worth of imports of petroleum and its derivatives. Meanwhile, electricity rates, which are to some extent related to the prices of petroleum and its derivatives, threatened to go up significantly.

This scenario changed radically as of August 2004 when the operation of the Camisea project started. Two years later, the following positive impacts of its implementation were identified:

- An annual GDP increase of 1 percent throughout the life of the project (30 years).
- Fiscal revenues of \$1.4 billion (19 percent of total revenues).
- An annual reduction of \$500 million in the fuel trade deficit (the balance of trade, however, remained negative).
- An average 30 percent reduction in electricity rates (these rates are calculated based on the effects of projects 4 years before the implementation phase starts). Obviously, this reduction benefited the poorest.
- 7,200 new permanent jobs and another 15,000 temporary jobs.
- By law, 50 percent of the royalties were transferred to the producing region (Cuzco) and an intangible fund was created to finance projects in the regions affected by the project.

I would like to mention that there is no existing legislation in any of the other South American countries that mandates the transfer of such level of resources to the regional and municipal authorities.

Moreover, I have to add that putting a value on these reserves not only reduces the dependency on energy imports but it also opens a window of opportunity for the export of LNG to Mexico and the United States, as well as to other countries. In his recent visit to Chile, President-elect Alan Garcia highlighted the importance of the second phase of the Camisea project.

I have already referred to the benefits derived from the Camisea project for the population as a whole. In the case of the poorest, the project allows a reduction in electricity rates just when the international price of crude oil jumped from \$25 to \$70 per barrel. Just imagine what would have happened in Peru in 2005 and 2006 if, as was the case for the last two decades, the implementation of the project had been postponed.

Furthermore, the infrastructure resulting from this project is located in the departments of Cuzco, Huancavelica, and Ayacucho, where a high percentage of the population lives under the poverty line.<sup>1</sup> It is precisely in these departments where health infrastructure, more than 600 kilometers of highways, and 20 bridges were built.

The Camisea project has certainly had negative effects on the populations living in the area involved. In particular, the indigenous people who live near the gas production facilities have been affected the most. The impact is even worse since some of these indigenous populations had had no contact with the outside world until the project started. In this respect, some of the lessons learned are taken from the recommendations made by different national and international organizations in order to mitigate the negative impact resulting from the implementation of the second phase of the project (exploitation of lot 56). In particular, I would like to refer to the set of detailed recommendations contained in the ombudsman's report,<sup>2</sup> which I think should be discussed and eventually implemented before starting the following phase of the project.

The main recommendations in the ombudsman's report are as follows:

- Approve specific regulations to effectively protect the rights of the indigenous populations in isolation and at first contact;
- Determine assessment criteria that ensure fair compensation for the damages caused;
- Design and implement mechanisms that ensure fair negotiations and technical assistance to the indigenous communities;
- Modify the current legislation on right of way;
- Intensify the state control over the environmental and social commitments undertaken by the companies involved;
- Strengthen the performance of technical and multidisciplinary inspections of the works that the project entails;
- Extend the period between the release of the studies on environmental impact and the public hearings.

When the decision to go ahead with the Camisea project was taken, the Government of Peru was aware that a project of this importance and complexity, and which touched very sensitive territories of the country, required compliance with careful social and environmental policies. It was with this aim in mind that the Government of Peru proceeded from start.

Thus the Department of Environment, within the Ministry of Energy and Mines, was responsible for holding public preliminary hearings on Camisea and its impacts and evaluating the studies on environmental impact presented by the companies involved in the project.

Additionally, the Government of Peru considered necessary to strengthen the capacity of the state agencies responsible for overseeing the environmental and social aspects of the Camisea project, to ensure the sustainable development of the area involved, and to protect the most vulnerable communities.

The Government of Peru also started a program, financed with a loan provided by the Inter-American Development Bank, aimed at strengthening supervision and monitoring capacities, protecting sensitive biodiversity areas and supporting regional and local governments.

With a staff of 25 environmental specialists, OSINERG is responsible for the supervision and monitoring of the environmental impact resulting from the Camisea project. So far, OSINERG has carried out 580 inspection visits to the project sites and detected up to 3,078 irregularities, 89 percent of which have already been corrected. Meanwhile, court decisions are pending involving 33 of the 329 remaining irregularities.

The project is also supervised by DIGESA, an agency within the Ministry of Health that monitors the quality of the water, and by INRENA, which is responsible for protecting the natural resources. Further monitoring of the project is carried out by the indigenous communities with the sponsorship of the Government of Peru, the companies, and civil society organizations.

The coordinated work of these three agencies—OSINERG, DIGESA, and INRENA—aims at ensuring adequate management of the environmental impacts and has led the companies involved in the Camisea project to comply with the guidelines set by the EIA.

<sup>1</sup> According to the National Institute of Statistics, 48 percent of the population remained under the poverty line in 2005.

<sup>2</sup> "The Camisea Project and Its Effects on the People's Rights," Ombudsman's Report No. 103, March 2006.



As an additional important measure, more than 7,000 deeds granting ownership rights over land along the gas pipeline were issued. There were 2,000 compensation cases for land expropriation, 95 percent of which were fairly settled. As for the pending cases, the Government of Peru is working on improving the existing legislation.

The office of the ombudsman was created as an impartial entity within the Catholic University of Peru, responding to the Government of Peru's concern about the need to establish a conflict resolution mechanism. So far, the ombudsman has received 680 complaints, 87 percent of which have already been settled.

I would like to make a general comment beyond the scope of the questionnaire I was provided with.

The committee's concern about the role of the multilateral development banks in financing big infrastructure projects, particularly energy sector projects, coincides with the discussion on the financing of extractive industries that took place at the World Bank's board of directors' meetings for the past 2 years. During these discussions, in which governments, private companies, NGOs, and the academic world participated, maximalist positions were adopted such as the withdrawal of multilateral organizations from the financing of these industries. Final consensus was reached on the need to continue and increase the financial support to these projects but at the same time to incorporate the highest environmental and social standards when assessing these projects.

On the other hand, there is ample empirical evidence, provided by the World Bank and the Inter-American Development Bank, showing a high correlation between investments in infrastructure and growth of the GDP. Moreover, considering the deficit in infrastructure in the Latin American region, a recent study by the World Bank<sup>3</sup> shows that if the region had increased its levels of investment in infrastructure to equal those reached in the Asian region in the last 20 years, its GDP would have gone up 2 percentage points on average.

In the case of the Camisea project, out of the total investment required for the implementation of the first phase, which went up to \$1.6 billion, the Inter-American Development Bank contributed only \$75 million for the construction of the gas pipeline. Even if the Inter-American Development Bank, at the request of some NGOs, had decided not to participate in the financing, the project would still have been carried out. At some point even the sponsors of the project considered withdrawing the request for financing due to the delay and uncertainty of the procedure. At the request of the Peruvian Government, the paperwork was completed and the loan was approved. For this reason, I clearly support the engagement of the international financial institutions in infrastructure projects, particularly energy-related ones. The design and evaluation of projects, especially those on social and environmental matters, will benefit from the lessons learned by these institutions.

In sum, urgent infrastructure projects like Camisea will be carried out with or without the assistance of multilateral financial organizations. There are clear environmental and social advantages if organizations like the World Bank and the Inter-American Development Bank continue to expand their portfolio of infrastructure projects, particularly energy-related projects.

To conclude, I agree with the statement of Domingo Cavallo, ex-Minister of Finance of Argentina, before this Committee on Energy Security: "South America's self-sufficiency in terms of energy has been deteriorating as a result of populist policies and short-term objectives." In this sense, Camisea, with its second phase about to start, represents the step in the right direction and, depending on the magnitude of the reserves to be discovered and exploited in Peru, will also contribute to the security of South America and, eventually, of the whole hemisphere.

Thank you very much.

The CHAIRMAN. Well, thank you very much for that very important testimony. I would like to call now upon Mr. Herrera.

**STATEMENT OF HON. CARLOS HERRERA DESCALZI, FORMER MINISTER OF ENERGY AND MINES, VICE-DEAN, NATIONAL ENGINEERS ASSOCIATION OF PERU, LIMA, PERU**

Mr. HERRERA. Mr. Chairman, members of the committee, I deeply appreciate this opportunity of being in front of you in order to talk about Camisea project. My background is that I am working in energy sector since 30 years as consultant, as engineer, as uni-

<sup>3</sup>See Marianne Fray and Mary Morrison, Infrastructure in Latin America and The Caribbean: Recent Development and Key Challenges, World Bank Report No. 32.640-LCR, August 2005.

versity professor, and of these 30 years, 8 months as Minister of Energy and Mines during the transitional government.

In that moment it was my responsibility, the signature of original contracts of Camisea project, and we did it because we considered that Camisea was a very, very important project for the country. Peru lacks hydrocarbon reserves. Peru became twice in its life a net importer of oil, and we are still net importer, even with Camisea, so we need to find more resources.

But Camisea, in my opinion, was not a project addressed to reduce prices. The real sense of Camisea was energy security, because we need to think in a broader sense, in a long time. Many promises of Camisea were tied to prices. We cannot fulfill them. We cannot meet them any longer. Last week a new law has been passed, which objective is to raise the tariffs.

The facts are, we have had five spills with the pipeline. This is a fact. Another fact is that the feeling of the people is that they are not being reached by the benefits of Camisea. They consider that the promises were too much, and what they really received is too few. If we go and compare this with the votes during the elections, the areas where Camisea project is voted for Humala, with a very high score in favor of him.

The fact is that a congressional committee, after 3 months of investigations of Camisea results, involving five members of the congress and several people, they arrived to some conclusions in their report. One of them is that the main aim of the government was to arrive on time, to meet the dates for the inauguration of the project, and the quality of the project has been sacrificed in front of this goal.

They also find political responsibilities in the ministers during the construction period, and they also find administrative and even criminal wrongdoing of officials. One of the most respected newspapers of the country make an independent report about the benefits to the people in the region where Camisea has been built, and they find that the performance was wrong. Peru is a country where one of each four citizens doesn't have access to electricity. The poorest people do not have electricity, so very difficult the benefits of Camisea will reach those people through electricity.

As I told you, the essence of Camisea was energy security. Export was a secondary objective, after the first. Only after local energy needs have been warrantied, the legal framework and the contracts of Camisea have been modified to allow export, that were supposed to be destined to Peru. In my opinion, the development of Camisea II shall not come at the cost of not meeting the objectives of Camisea first stage. This is the main point.

Regarding the multilateral development banks, I think that it's much better that they are there. It's much better that they participate in these projects. Without them, the standards will not be met.

I understand that the performance has not been good, that what was planned has not been really accomplished, but this is not a problem of whether the standards, this is a problem of implementation. It is necessary to support strongly the country in the capacity of implementing those plans. Otherwise, we will not succeed.

And looking at the future, I will be for expanding Camisea. It's my opinion. It's a requirement of the country. It's a requirement of the region. I will be for the necessity of the support from the banks, but they, as I said, need to improve their capacity to ensure that the standards are implemented.

Thank you, Mr. Chairman.

[The prepared statement of Mr. Herrera follows:]

PREPARED STATEMENT OF HON. CARLOS HERRERA DESCALZI, FORMER MINISTER OF ENERGY AND MINES, VICE-DEAN, NATIONAL ENGINEERS ASSOCIATION OF PERU, LIMA, PERU

Since very early on in its history, Peru has been an oil producing country. In fact, the second oil well in the world to be drilled was in Peru in 1863.

In the first half of the 19th century, Peru started to produce and export oil; being an oil producer, in middle of 20th century, the Peruvian population was encouraged to consume oil rather than any other kind of fuel. At that time, Peru's energy supply was mainly composed of hydropower and oil. With regard to the power sector, even today, Peru continues to have a very important hydroenergy potential that is several times greater than its today's consumption.

As local oil consumption was increased and the depletion of oil production started, in 1968 the situation in Peru changed to become a net oil importer. Considerable effort was dedicated to finding new reserves, only succeeding at the end of the 1970s; an oil pipeline was built, that conveyed oil from the northeastern Amazon forest to the coastal line where the two main refineries were located. At the beginning of the 1980s, Peru recovered its condition as an oil exporter, and then, in the middle of that decade, the reservoir of Camisea, in the central region of the Amazon forest was found.

Shell was the company who found Camisea's reserves. As it was difficult to arrive at an agreement with the Peruvian Government, they decided to leave. Later on, they returned and agreed a program at the beginning of the 1990s. Finally in 1998, Shell decided not to continue in Peru and to withdraw, thereby returning the gas fields with proven reserves to the Peruvian Government.

Meanwhile, at the beginning of the 1990s, once again Peru became a net oil importer due to the decline in the production of the new fields in the Northeastern Amazon Forest, which were found at the end of the 1970s. Efforts were made to carry out more exploration in the jungle and offshore, so wells were drilled, but unsuccessfully. Since then, every year the negative gap between oil production and consumption increased, in detriment to the Peruvian commercial balance and economy. The only hydrocarbon resource of significance was that of Camisea, where roughly 80 percent of the energy content was in gas and the other 20 percent were condensates; however, from an economical point of view, that 20 percent of condensates represented 50 percent of the economical value of the field.

Once Shell withdrew its operations from Peru, after a process, the government tendered Camisea project, dividing the project into three parts: (i) field exploitation; (ii) transport of liquids and gas; and (iii) gas distribution in Lima and Callao. The field winning bid was granted in February of 2000 and those of transport and distribution were granted in September of that year; however, government delayed its approval to the signature of the contracts. At this point in time, in November 2000, Peru's President resigned by fax, he himself being out of the country at the time. An interim government was charged to rule the country during a transition period until a new government was elected. After elections carried out in May of 2001, a new government, the current one, was elected for the period 2001-06, and it will conclude its mandate at the end of July 2006. Now, recently, a new government has been elected for the 2006-11 period.

In December of the year 2000, following the revision of Camisea contracts and some modifications intended to fortify the social benefits of the project, the transition government authorized its signature. The contracts were made public and published on Internet; they are still available there.

Previously and along year 2000, Camisea had become a controversial project because of complaints from many sides, especially those received from the Cusco region where the resources were located, due to the fact that they considered that they deserved more benefits and wanted that the pipeline will arrive to Cusco; also because of the fear of the environmental and social impacts on the native population of the area. In that period, Camisea's contracts were kept nearly as a close to be a secret.

As economical strategy, Camisea was destined to modify the energy consumption matrix of Peru. The aim was to change the country's trend to oil in favor of a preference to natural gas, based on the proven reserves left by Shell.

Camisea natural gas was destined to replace the existing oil derivatives used in power generation, industrial field consumption, public transport, and domestic consumption.

Camisea involves four contracts: (1) for the field, (2) for the transport of liquids, (3) for the transport of gas, and (4) for the gas distribution.

Field contracts fixed wellhead gas prices, to be escalated according to a basket of residual oils formula. Transport and distribution contracts also contain formulas for escalating prices.

Gas exportation was allowed, conditioned to priority supply to internal market. It was agreed that to consider internal market supply as ensured, remaining reserves shall be able to supply local market requirements in next 20 years. This evaluation will be made on an annual basis, in order to allow the exportation in this year. This mechanism looked for to incentive the finding of new reserves for an exportation market, while ensuring the local market sufficiently in advance so as to when it arrive to be impossible, there will be a period of 20 years as to find and implement a new solution, before local reserves became completely depleted; the aim was energy independence.

Camisea Field Contract matters Block 88. Its proved reserves will allow the exportation since the beginning, but they cannot sustain it for a period of 20 years, without finding new reserves. The finding of new reserves and the risk of none succeeding belonged to field's concessionaire.

A legal framework protected the compromises: Gas Law (Law 27133), Gas Law Ruling and Camisea contracts. Gas Law and Gas Law Ruling were invoked by contracts.

During this current government, priorities were inverted, privileging Camisea natural gas exportation rather than local market satisfaction.

At the beginning there was an attempt to modify royalties, diminishing them for reserves dedicated to exportation. As former minister, I expressed my objection, due to the fact that the only bidding criterion to be the winner of Camisea tender was precisely the largest royalty percentage to be paid. Because of this the winning bid for the field contract was allocated to a consortium of small- to medium-sized companies who offered to pay a royalty of 37.24 percent rather than to a big and much more qualified bidder who offered 35.5 percent as royalty. Moreover, the fact that most of the gas was going to be assigned to exportation, could left the suspect of an underhand maneuver to grant the winning bid to one particular party with afterwards lower royalties.

Financing of the project was not an obligation of Peruvian Government; the companies were selected because they shall be able to finance the project by themselves. Economy and energy ministers dedicated their effort to finance Camisea and local consumer was forgotten. No effort was dedicated to local development; after the gas arrived to Lima in August of year 2004 and consumers asked how to benefit from it, just government realizes that there were as their duty.

Moreover, government forced local consumers to finance companies. In order to make the construction of the Camisea Gas Pipeline feasible, faced with the lack of a sufficient initial gas demand as to ensure return on the investment, consumers shall pay within its electricity service monthly bill a contribution to pay the nonused capacity of gas pipeline. This subsidy was justified by the benefits of lower power generating costs, as consequence of the availability of a cheaper fuel, as it will be the gas. This commitment presupposed that this payment would be effective once the service was available. However, in November of year 2002, government authorized a payment in advance, that resulted in a public contribution of nearly 100 MMUS \$ for pipeline construction, against a reduction on gas transport tariffs.

In case of none being possible to continue with Camisea consortia, the other bidder (Total Fina) was available to take it over.

During the construction period of the project, several other modifications were made to the contracts, which at the end operate against consumer's interests, as it was with modifications made to the gas distribution contracts. Transport and distribution projects were bided with a tariff fixed in advance and that in distribution shall last for 8 years; rules were changed against the consumers: Residential tariffs were increased in more than 40 percent at the beginning of supply, with approval of General Bureau of Hydrocarbons (Ministry of Energy and Mines).

The distribution contract established an obligatory minimum yearly goal of number of effective residence gas connections. The condition of effective supply was modified to potential supply, meaning that to fulfill the compromise it was not

longer necessary that consumers were connected; but rather when distribution lines passed near to his residence.

Whilst the gas pipeline was still being constructed, news arrived appertaining to the noncompliance of regulations concerning the environmental conservation and the effects that the project would have on native communities. It appeared that the press always kept quiet about or minimized the facts.

The final location of the liquids pipeline (now with five accepted leaks) was not Pisco/Paracas where a nature reserve is; final location was 70 km north from there and to be changed required the approval of Ministry of Energy and Mines.

Contractually, the discharge of the condensates pipeline was to terminate in a point on the coast close to the fractioning plant. This was Pampa de Clarita, in the Province of Canete, Department of Lima, located approximately 70 km north of Pisco (contract mentioned as geographical coordinates 13.15466° south and 76.36996° west). This location could be changed by mutual agreement between the companies but always with the consent of the Ministry of Energy and Mines. Companies asked to move that point to the buffer zone of Paracas Bay only natural reserve in Peru's coastline. It was accepted by the authorities. Organizations of citizens and NGO's, which were fighting to preserve nature, protested and a period of discussions was commenced. These discussions concerned the offshore installations but not the ones onshore. Authorities then accepted construction in the onshore zone, whilst they continued to discuss the offshore zone, until they were faced with the fact whereby to modify the marine location would oblige them to move the onshore installations, which meant that the project would not be built within the preestablished timeframe. This was how it was accomplished to install the terminal near to the Paracas Reserve zone, completely ignoring all of the protests. On the other hand, a program to muffle this situation was defined with the credit support from the international development banking institutions.

During the construction phase and with the object of distracting the public opinion from the difficulties and focusing it on the benefits involved, it was continually announced that the arrival of Camisea would benefit everybody by reducing the price of gas and electricity; promises continued even when they became unsustainable. Just a few days after the construction was completed and a new reduction of electricity tariffs was promised, the electric tariffs were raised and the LPG—which was the only gas known to the population in Lima—went up.

On the other hand, the industrial companies that accepted to purchase gas since the beginning of the project were more benefited than they expected, because the international prices of the fuel had risen considerably, which made using gas more advantageous. However, this benefit was not enjoyed by the public in general. The application in the electric generation could not be initiated immediately to full capacity in the plants which had been converted to gas. The restriction was due to the fact that the distribution tubing was built with less capacity than was necessary. This resulted in Electroperu as prejudiced party. Electroperu is a state-ruled company that formally belongs to state pensioners. As ruled by state, they fear to initiate a reclaim against gas supplier.

Within this climate, failures in the pipeline that transported the liquids began to occur, causing spillage of said liquids and damage to the environment, and in particular to the water currents that provide the fish that are part of the diet of the native inhabitants of this area. When the first failure took place, while initially being surprising, there was a generally comprehensive attitude, accepting that eventualities could occur. However, the failures continued, even though an effort was made by authorities and companies to convince the public that this was a normal situation.

Under these circumstances, in year 2006, in a public hearing of the IDB in Washington, it was claimed that the tubing had been constructed without sufficient quality and with negligence as far as the materials and specialized workmanship were concerned; that the hurry to catch up on deadlines and the lack of economical resources had brought about these consequences. The accusation indicated that throughout the extent of the tubing, there had been many susceptible zones which could be likely to suffer further failures. This latter comment coincided with a rather ignored similar appraisal carried out some weeks before by OSINERG, the regulating organism and supervisor of the investment in energy.

The potentiality for new failures and the accusations of lack of quality were denied by the companies and by the authorities; this took place while the political campaign for the election of a new president of the republic was in full swing. Under these circumstances, a new failure of a larger dimension than the previous ones occurred. Without obtaining more information, the prime minister attributed it to an act of sabotage, an explanation which was difficult to accept. On this occasion, the press was overly generous when dealing with the subject; the television transmitted

images of a hut and domestic animals burned, indicating that also two children had been severely wounded by the explosion that followed the gas leak. This occurrence was heard of far and wide. The political candidates from all the tendencies condemned the event and demanded investigations considering even the renegotiation of the gas contracts. This situation was followed by open requests of renegotiation to other sectors, mainly the mining.

In the congress, an investigative committee was constituted; the executive designated a committee in charge of hiring an audit; the Association of Engineers indicated that, without a doubt, faults in the engineering or in the construction existed that were undoubtedly the responsibility of the company that owned the tubing. The discussions on this subject led to accusations that members of the government, including the prime minister, were alternating between working for the state and for the company, which led to a request for impeachment in the congress.

In the time passed until now, the investigative committee of the congress has issued a report indicating that a presumption of guilt exists that should be investigated by the district attorney. The Association of Engineers, in their quality as representative of the civil society in the committee in charge of hiring the tubing audit, has manifested their discrepancy; as in reality, this audit is only being carried out by the state as it excludes all environmental and community aspects, as well as all the phases up until the construction and also for being in disagreement with the terms of reference, for which reasons they have preferred to withdraw their participation.

The primary rationale for the project—shifting the country toward cheap natural gas—was energetic independence, a cleaner and cheaper fuel was an up side: Peru's dependence on oil in commercial energy is strong and one third of the consumed oil is imported. The exportation project is against the objectives of the project; in the first 20 years 4 TCF will be dedicated to local market while 4.2 TCF were dedicated to exportation.

Changes to Camisea I means to embark Peru into a new source of energy that after initial stage to win the market (around 10 years), as adult will not have the strength to sustain the next 15 years, not being that new important reserves will be found. Does it have a strategic meaning for a country?

Camisea II is the mutation of a national effort for a shift from oil to natural gas into an exportation project to favor a company.

To move from one condition to the other (old to new Camisea), it was necessary to produce significant changes to the legal frame; those changes have been made systematically, along the time, hiding the real aims and negating in front of the people the real intentions; it has been supported by people inserted in key positions of the government; all of this turns the process into illegitimate.

Camisea's contracts and the legal framework were systematically modified in order to benefit and prioritize the exportation without the obligation to find new reserves. So it was that the Gas Law Ruling, the Gas Law itself, and finally the Camisea contract were successively modified.

As an example of how it proceeded, to modify the Gas Law, it was figured out a situation to change its article No. 4; this situation was one of sending gas to atmosphere in Peru's northern coast fields. In order to correct that situation, it was proposed to add two subpoints "c" and "d," to article No. 4. It was accepted by congressmen and like it was proposed, it was innocuous for Camisea's contract. But without reporting, the new writing also deleted part of subpoint "a," which resulted in an insurmountable obstacle to modify Camisea gas field contract as to allow exportation without finding new reserves. None of the debates included the issue of subpoint "a," which was the real objective of this modification. Months later, dated as November 30, 2005, and invoking this change in subpoint "a," modification of Camisea field contract was dictated by Supreme Decree No. 050-2005-EM, allowing the company involved to dispose for exportation part of the reserves that were contractually destined for the internal market.

The Block 56 contract (Pagoreni, with proven reserves found by Shell and returned in late-1990s to state) is so uneven and harmful in royalties and tax benefits that will bring resistance in future, when more people arrive to understand its meaning.

The forgetfulness to local market and initial objective of the project shall also be a responsibility of banks.

The way in which the resources to the inhabitants of the forest had been supplied is also a big mistake; poor effort was made in obtaining something positive; just to provide money, no matter what they will do.

Pleasing attitudes of Peruvian authorities in front of poor construction or operation created social mistrust on all authorities, companies, and institutions; this feeling is now extending to other sectors (mining, energy, communications), and to

the privatization process of the 1990s. After the fifth leak, prime minister accepted in congress that he was linked to Camisea's companies.

The atmosphere created about the nonlegitimacy and even illegality of the process that converted Camisea I in Camisea II (modification of contracts and laws, special laws for Hunt Oil, participation of prime minister, way in which gas law was modified via a trojan horse asking to add something to one article and without permission deleting key words of the same article) will certainly bring problems for the future; indeed, it has already caused problems: credibility of government (and also of institutions like IDB) is in question; voices have risen asking the revision of Camisea's contracts, with risk of extending to all mining and energy companies.

One of the main concerns is royalties indicated in contract for Block 56. The exportation project was analyzed and considered economically feasible for an international (Henry Hub) price of US \$3.2/MMBTU; it was announced with royalties of 38 percent, more than Camisea (37.24 percent). But it was not mentioned that royalties will not be paid on international price, but roughly on one seventh of international price (according to a table of clause), meaning that real royalty was 5-6 percent; in addition, for prices over US \$10/MMBTU royalties will be paid as for US \$10/MMBTU.

The CHAIRMAN. Thank you very much, Mr. Herrera, for your testimony.

I would like to call now on Dr. Korinna Horta.

**STATEMENT OF DR. KORINNA HORTA, SENIOR ECONOMIST,  
ENVIRONMENTAL DEFENSE, WASHINGTON, DC**

Dr. HORTA. Thank you, Mr. Chairman and members of the committee, for the opportunity to contribute to this important process, which we hope will result in measures to obtain greater oversight and improvements in the development effectiveness of MDB lending for large-scale infrastructure.

In addition to my own organization, Environmental Defense, a national environmental organization with about 400,000 members, my statement is made on behalf of two highly respected, international award-winning nongovernmental organizations in the countries directly concerned with the Chad-Cameroon oil and pipeline project: The Chadian Association for the Defense and Promotion of Human Rights, based in N'Djamena, Chad, and the Center for Environment and Development in Yaounde, Cameroon.

Although the situation in Chad differs from the one in Cameroon, both countries are governed by authoritarian regimes known for corruption and human rights abuses. My African colleagues work under challenging circumstances and often at risk to their personal safety. Our organizations have worked together to monitor the oil and pipeline projects since we first learned about World Bank plans to finance this project about 10 years ago.

At a cost of about \$4.2 billion, this project represents the single largest investment in sub-Saharan Africa today. It includes the development of oil fields in southern Chad and the construction of a 655-mile-long pipeline through neighboring Cameroon to the Atlantic coast. The Exxon Mobile-led consortium behind the project made construction dependent on the World Bank's participation as an insurance policy against political risk in a highly volatile region.

Unfortunately, oil production in African countries has often brought, instead of prosperity, greater poverty, destruction of the environment, human rights violations, and sometimes violent conflict. African and international organizations, as well as voices in the United States Congress, called on the World Bank to delay financing of this project until effective measures to protect human

rights and the environment had been put in place and the governments demonstrated their commitments to poverty reduction.

But, despite these expressions of concern, the World Bank approved financing for the project in 2000 and first oil was exported in 2003. From the outset, the World Bank viewed this project as a model for large-scale infrastructure investments in extractive industries. Poverty would be reduced while the environment would be protected.

But reality has turned out to be quite a different matter. The innovative revenue management system the World Bank put in place in Chad to ensure that oil revenues be mostly used for antipoverty efforts is in deep trouble. The World Bank's capacity-building project, which intended to ensure that the governments would be able to manage revenues and address the environmental and social impacts of the project, has largely been ineffective.

While Chad's oil revenue management system was troubled from the beginning, the crisis broke into the open in January 2006. That is when President Deby of Chad effectively gutted the poverty reduction intentions of the original revenue management law that had been agreed to with the World Bank. Essentially, President Deby needs to buy weapons.

While the worsening security situation in Chad is complex, the question of who gets to control the oil revenues looms large in a power struggle within President Deby's own ethnic group, whose traditional homeland is on Chad's eastern border with Sudan, that is, Darfur. The stakes are high, and clearly oil money is further exacerbating an already bad governance situation.

After temporarily suspending loans, disbursements have resumed, and the World Bank is now negotiating a new agreement with Chad, scheduled to be concluded by the end of September. My written statement goes into more detail about the impacts of the project, but here I would like to relate something more directly on a human level.

Last fall I visited the village of Nkoltara in Cameroon, which is on the pipeline route and just 15 miles north of the capital of Yaounde. Amongst the people I met there was a woman desperate about the future of her children. She told me that before pipeline construction she was making enough money from raising chickens to afford to rent a room for her school-age children in the nearest town so that they could attend school. She was, however, unfortunate in that some of the most intensive construction noise occurred in front of her house. As a result, all the young chicks died, and she received no compensation to replace them. Now there is no money to rent a room for her children and they no longer go to school.

In the same village, the water source is adjacent to signs indicating where the pipeline is buried. The water seemed to be covered by a milky film of grease, yet this is where the children, clothed in tattered rags, were lining up with buckets of different sizes to fetch their families' water supplies. According to the villagers, skin rashes, gastrointestinal disorders, and other previously unknown ailments are now widespread in the community. Mr. Chairman, this is not a unique case. NGOs in Cameroon have documented hundreds and hundreds of similar cases.



What about Chad? In a recent interview, the Catholic Bishop of Doba, the main town in the oil-producing region, described the project as having brought prostitution, alcoholism, and environmental degradation to the region. To highlight the lack of development benefits, he cited the village of Kome, which is still waiting for a simple water well, despite the fact that it is located adjacent to Exxon Mobile's 21st century, state-of-the-art local headquarters. The Bishop added that he was glad to see that the project had built some schools and clinics, but regretted that to date there were no teachers, doctors, or nurses to put these buildings to use.

The World Bank had promised that the success of this project would be measured by effective poverty reduction and not by the number of barrels of oil exported. Something clearly has gone wrong here, and the costs for this are being borne by some of Africa's poorest people.

Beyond Chad and Cameroon, it is important to draw lessons from this project, especially in light of the fact that the World Bank is embarking on a new high-risk strategy in infrastructure. The central lesson is not new. The essence is summarized by a Bank commission's expert study known as the Extractive Industries Review.

It recommends a phased approach. Basic human rights protections and some level of demonstrated institutional capacity to manage revenues, as well as the social and environmental impacts, must be in place before launching large-scale, high-risk investments. The Bank should begin by engaging in a transparent public process to define minimum good governance criteria and to clearly link decision making on the financing of projects and policies to those criteria.

Thank you.

[The prepared statement of Dr. Horta follows:]

PREPARED STATEMENT OF DR. KORINNA HORTA, SENIOR ECONOMIST,  
ENVIRONMENTAL DEFENSE, WASHINGTON, DC

Mr. Chairman and members of the committee, I thank you for the opportunity to contribute to this important process, which we hope will result in measures to obtain greater oversight and improvements in the development effectiveness of World Bank lending for large-scale infrastructure projects.

#### I. THE PROJECT AND ITS CONTENT

At a cost of \$4.2 billion, the Chad-Cameroon Oil & Pipeline project is the single largest investment in sub-Saharan Africa today. It includes the development of oil fields in southern Chad and the construction of a 650-mile-long pipeline through neighboring Cameroon to the Atlantic coast. World Bank support for the project was a precondition required by an international consortium led by Exxon Mobil for building the project.

The World Bank provided \$39.5 million to Chad to finance minority holdings TOTCO and COTCO, the companies established by the oil consortium in Chad and in Cameroon, and \$53.4 million to Cameroon for minority holdings in COTCO. In addition, the International Finance Corporation (IFC), the World Bank's private sector lending arm, provided loans of \$100 million each to TOTCO and COTCO and mobilized an additional \$100 million from other sources, known as B-loans.

Originally, the World Bank's financing structure for the project involved IDA loans for Chad and Cameroon since both countries are not considered to be credit-worthy enough to qualify for IBRD market lending rates. But some donor countries expressed strong concern about using funds from the World Bank's lending window for the poorest countries, IDA, for the partial assumption of risk for a consortium led by one of the world's largest corporations, Exxon Mobil. In order to avoid further controversy during IDA replenishment negotiations, the World Bank switched its

funding to the IBRD enclave loan window, which typically includes an off-shore escrow account for debt service.

In addition to these loans, the World Bank provided two IDA credits to Chad for capacity-building projects, the management of the Petroleum Economy Project (\$17.5 million) and the Petroleum Sector Management Capacity-Building Project (\$23.7 million). In order to build Cameroon's capacity, the World Bank provided an IDA credit for the Cameroon Petroleum Environment Capacity Enhancement project (\$5.77 million).

From the outset, the World Bank viewed this project as a model for using large-scale infrastructure investments in extractive industries for poverty reduction.

To the consortium, World Bank participation represented an insurance policy against political risk in a volatile region, as well as a seal of approval of the project, which would draw other financial institutions, such as the U.S. Export-Import Bank, into cofinancing the project. The World Bank claimed that its innovative partnership with the consortium, led by Exxon Mobil, represented a unique opportunity to reduce poverty in one of Africa's poorest regions.<sup>1</sup> This was to be a different kind of project, the World Bank asserted, where success would be measured ". . . by poverty reduction rather than by barrels of oil produced or millions of dollars received by Chad for oil exports."<sup>2</sup>

Oil development in sub-Saharan Africa has a history of ruinous corruption, armed conflict, human rights violations, and environmental degradation.<sup>3</sup> Although the situation in Chad differs from that in Cameroon, both countries are governed by authoritarian regimes. Both countries have been ranked amongst the most corrupt countries in the world on Transparency International's corruption perception index. Corruption in both countries appears to be at the center of patronage systems that maintain the regimes in power.

Concerning the human rights situation, the State Department's annual report on human rights has for many years documented widespread abuses and the lack of the ability of citizens in both countries to change their government by democratic means.

In view of this situation, there was widespread concern among African and international nongovernmental organizations, some donor governments, and voices in the United States Congress regarding the oil project's ability to deliver development benefits. Chadian civil society organizations, supported by a broad international network, did not oppose the oil project per se, but in light of the significant risks, called for a moratorium on financing the project until legal frameworks to protect human rights and the environment had been put in place and the government had shown a commitment to reducing poverty.

In May 1999, a bipartisan congressional letter addressed to then-World Bank President James Wolfensohn, and signed by 27 members of Congress, requested that the project be postponed until civil and political rights were respected in both countries and the political will and capacity established to implement environmental protection.

Yet despite numerous warnings and expressions of concern, the World Bank decided to proceed with the project and simultaneously build the capacity of both governments in two of the world's most corrupt and poorly governed countries. Sadly, one of the key lessons to be drawn from this project is that one must first ensure that governance and management capacity in countries with weak governance are built up before launching large-scale infrastructure/extractive industry investments.

## II. THE WORLD BANK'S MISSION OF POVERTY REDUCTION AS REFLECTED IN THE PROJECT

Largely in response to public pressure, the World Bank took some unprecedented safeguard measures intended to address some of the concerns. At the center of these was the passage of a revenue management law in Chad intended to ensure transparent use of oil revenues for poverty reduction and the establishment of an oversight committee to monitor the law's implementation. The law required direct oil revenues to be used for poverty reduction (80 percent), to be saved for future generations in the post-oil era (10 percent), and to be earmarked for the oil-producing region itself (5 percent). Notably, the law contained some major loopholes. It covered only the three initial oil fields under production by the Exxon Mobil-led consortium and did not apply to indirect revenues, such as income taxes on the consortium.

<sup>1</sup> The World Bank, "Chad-Cameroon Petroleum Development and Pipeline Project," Project Appraisal Document, April 20, 2000, p. 12.

<sup>2</sup> *Ibid.* p. 13.

<sup>3</sup> See, for example, Ian Gary and Terry Lynn Karl, *Bottom of the Barrel: Africa's Oil Boom and the Poor*, Catholic Relief Services, June 2003.

In addition, the World Bank decided to finance three separate capacity-building projects to be carried out in parallel with the oil project. These were meant to assist the Chadian Government with managing the oil economy and to provide both Chad and Cameroon with the capacity to manage the environmental and social impacts of the project. When the World Bank approved financing for the project in June 2000, it hailed the project as a groundbreaking initiative to translate oil wealth into direct benefits for the poor, while mitigating any damage to the environment.

Construction of the project was complete 1 year ahead of schedule in October 2003 and Chad, a country slightly larger than three times the size of the State of California, with a population of about 9 million people, became an oil-exporting nation. Today, Chad exports roughly 200,000 barrels per day to the world.

### III. THE ADEQUACY OF SAFEGUARDS CONCERNING REVENUE MANAGEMENT, COMPENSATION, AND ENVIRONMENT

#### 1. Capacity-building

While the World Bank's role is to ensure compliance with safeguards, it is the task of the recipient country governments to implement them. In view of the lack of capacity of both the Chadian and Cameroonian Governments, the World Bank financed three parallel capacity-building projects intended to ensure that Chad's Government would be able to manage its new oil economy and that both Chad and Cameroon would be able to address the environmental and social impacts of a project of this magnitude.

The International Advisory Group (IAG), a World Bank commissioned group of project monitors, soon noted that this was a "two-speed project," in which the construction components advanced rapidly while government capacity-building lagged behind or failed to get off the ground. The IAG warned that the delays would compromise the success of the project.<sup>4</sup> Three years later, as oil was already flowing, the IAG concluded that the capacity-building objectives had not been met, adding: "The World Bank must share responsibility with the Government for having allowed funds for the capacity-building projects to be used for often unproductive studies and for construction projects, with serious consequences in terms of Chad's lack of training and preparedness."<sup>5</sup>

To date, no significant progress has been made. According to the IAG's most recent report on Cameroon, CAPECE, the capacity-building project for the Cameroonian Government, continues to be far from reaching its target objectives.<sup>6</sup>

The poor results of capacity-building efforts for oil revenue management have not advanced the World Bank's poverty reduction goals. Since construction on the project began in 2000, Chad has slipped on the United Nations Development Program's Human Development Index from No. 167 to No. 173 (in 2005) and average life expectancy has been further reduced from 44.7 years to 43.6 years. While it may be debatable whether this decline might have occurred with or without the project, the point is that the project was supposed to significantly benefit the poorest people of Chad and so far it has clearly failed.

Furthermore, a succession of reports by the International Advisory Group have documented that the lack of capacity to address the environment and social consequences of the project has had serious detrimental impacts on the affected populations in the oil-producing region in Chad and on many communities along the pipeline route in Cameroon.<sup>7</sup>

#### 2. Revenue management

*Chad.* Things got off to an embarrassing start when it became public in January 2001 that Chad had used part of its \$25 million signature bonus from the oil consortium for weapons purchases. The lack of transparency in the use of the funds violated the spirit, if not the letter, of the agreement with the bank to use oil revenues transparently for poverty reduction. This early transgression foreshadowed the more serious crisis in the revenue management system that has unfolded in recent months.

From the inception of the project, the Chadian Government has shown little good faith in implementing the revenue management law and has created considerable

<sup>4</sup> International Advisory Group, "Report of December 21, 2001," (IAG reports are available at [www.gic-iag.org](http://www.gic-iag.org)).

<sup>5</sup> International Advisory Group, "Report of Visit to Chad and Cameroon, May 17–June 5, 2004," July 2004.

<sup>6</sup> International Advisory Group, Report of Mission 11 to Cameroon, March 15–23, 2006, p. 18.

<sup>7</sup> Reports of the International Advisory Group can be found at [www.gic-iag.com](http://www.gic-iag.com).

hurdles for the functioning of the oversight committee.<sup>8</sup> It is largely due to constant prodding, including from the U.S. Treasury Department, as well as to the integrity of the oversight committee, that some steps toward greater transparency have been taken. By the end of 2005, \$245 million on oil revenues had been allocated to priority sectors such as health and education, but the government has limited absorptive capacity and little capacity to develop projects. At the same time, the oversight committee's reports have documented problems with government spending of the oil revenues, including irregularities in the transfer of funds, overpricing of goods and services, etc. The situation had become so critical that the World Bank told the *Financial Times* in August 2005 that it had serious concerns about how the Chadian Government was using the oil revenues.<sup>9</sup> But the oversight committee has limited resources, lacks independent financing, and has no power to ensure compliance with the revenue management law. Its role is limited to issuing reports without means or authority to monitor the effectiveness of corrective measures taken in response to its findings. Furthermore, committee members have expressed their frustration about lack of access to information from both Exxon Mobil and the Chadian Government.<sup>10</sup>

In January 2006, after several months of often public disputes between Chad and the World Bank, Chad's President Deby ratified significant amendments to the revenue management law that gutted the law's original intent. Claiming budgetary constraints and a worsening security situation, the new amendments added military expenditures to the definition of priority sectors for development, increased the share of oil revenues for discretionary government spending, and abolished the Future Generations Account.

In light of this flagrant violation of its loan agreements, the World Bank suspended \$124 million in planned loan disbursements to Chad, which in turn triggered the freezing of the London-based escrow account into which oil revenues were being deposited by the oil consortium. The freeze did not cover Chad's "Future Generations Account" and the government took possession of the \$36 million that had accumulated for use in the post-oil economy.

Faced with an armed rebellion by his own ethnic group, including family members upset about his determination not to yield power,<sup>11</sup> Chad's President Deby threatened to cut off the oil pipeline at the end of April 2006. Just before this deadline, the World Bank announced an "interim agreement" with Chad and the resumption of some loan disbursements to Chad. In the process, the World Bank provided President Deby with political support just prior to the presidential elections of May 3, 2006. These elections were by then already known to be so fraudulent that they would be boycotted by the opposition and ignored by international election observers.

Under the interim agreement, Chad passed a supplementary budget for 2006, which directs 70 percent of revenues to the original poverty reduction sectors, while maintaining the amendments that led to the suspension of loan disbursements and freezing of the escrow account in the first place. The World Bank has agreed to gradually release the blocked revenues over the next 3 months while negotiations are underway to devise a new revenue management law. A new agreement between Chad and the World Bank is expected by September 26, 2006.

*Cameroon.* Describing Cameroon's challenges in reducing poverty, the World Bank's most recent country assistance strategy for Cameroon reiterates findings from previous reports ". . . accountability and transparency in the use of public resources are insufficient, with scarce public resources poorly targeted to priority sectors; . . ." <sup>12</sup>

Despite these long-standing problems, a system to manage pipeline transit fees—about \$50 million a year—was not established. Despite Cameroon's top ranking on the list published by Transparency International, the World Bank simply assumed that the Government of Cameroon would use the royalties—which are substantially less than those earned by Chad and represent a much smaller fraction of the national budget—to improve living conditions for its people. Why the World Bank

<sup>8</sup>For a detailed analysis of oil revenue management issues in Chad, see Ian Gary and Nikki Reisch, *Chad's Oil: Miracle or Mirage? Following the Money in Africa's Newest Petro-State*, Bank Information Center and Catholic Relief Services, February 2005.

<sup>9</sup>Dino Mahtani, "World Bank Concern Over Chad Oil Revenues," *Financial Times*, August 20, 2005.

<sup>10</sup>BBC News (online), "Chad's Oil Watchdog 'Powerless,'" May 24, 2004.

<sup>11</sup>President Deby orchestrated a referendum to change Chad's constitution to end presidential term limits in June 2005, frustrating those who had hoped to succeed him after the end of his term in 2006.

<sup>12</sup>The World Bank, *Country Assistance Strategy for the Republic of Cameroon*, August 14, 2003, p. 7

would have made this assumption is unclear, since its own Operations Evaluations Department has documented the government's lack of commitment to poverty reduction.<sup>13</sup>

### 3. Compensation, social development, and public health

*Interview with the Bishop of Doba.* Bishop Michel Busso of Doba, the main town in Chad's oil-producing region, said in a recent interview that oil money is suffocating the region's development and that local communities are profoundly disappointed by the oil project.<sup>14</sup> Prostitution, alcoholism, and environmental destruction have become widespread. Plenty of money appeared to have come into the region but local communities have not seen benefits. As an example, Bishop Busso cited the small village of Kom, located near Exxon Mobil's 21st century state-of-the-art local headquarters, which continues to wait for the construction of a well. Bishop Busso was glad to see that some schools and clinics had been built, but added that he still was waiting for them to be put to use since there are no teachers and doctors.

*Unsustainable loss of land in the oil-producing region.* According to the IAG, local communities in Chad have lost more land and for longer periods of time than had been anticipated in the project's Environmental Management Plan.<sup>15</sup> Furthermore, restoring and returning land to the poor subsistence farming communities is often delayed by several years.

The loss of agricultural land is getting worse with the expansion of the oil project from the less populated area surrounding the Doba oil fields to the much more densely populated area around the new oil fields in Nya-Moundouli. The IAA is now questioning the viability of the region's agricultural systems given the loss of land, and has expressed concern about the adequacy of compensation payments for the loss of local livelihoods.<sup>16</sup>

*Lack of Legal Recourse.* In view of the general atmosphere of repression and absence of legal recourse, affected communities have few possibilities to obtain redress for their grievances. In cases where monetary compensation has been paid to individual households, local authorities supported by the military reportedly extort part of the compensation received by poor farmers, who have no justice system to which they can turn. Villagers who offer resistance have been beaten, and human rights workers who defend local villagers have received death threats and have been arrested.<sup>17</sup> For example, Nekarmbaye Gedeon, who heads a local section of the Chad-ian Association for Non-Violence in Krim Krim in the region of Logone Occidental, and four of his colleagues were arrested in March 2004 on order of the local police chief. After his release, he told an interviewer that his life was only saved because of an international campaign on his behalf.<sup>18</sup>

Another serious problem faced by affected people is the lack of accountability of the mostly foreign companies subcontracted by the Exxon Mobil-led consortium and their national companies TOTCO and COTCO. Once foreign firms have completed their tasks and leave the country, affected people have nowhere left to turn. One example is the case of about 70 workers who joined the claim submitted to the World Bank's inspection panel by the Center for Environment and Development in Cameroon. The workers had suffered occupational injury and as a result simply lost their jobs and received no assistance with medical expenses. In response to the claim, the inspection panel stated that it could not address the question of workers' rights since there is no World Bank policy related to the question.<sup>19</sup>

*Nkoltara, a Cameroonian village along the pipeline route.* In October 2005, I visited several villages along the central section of the pipeline route together with colleagues from the Center for Environment and Development in Yaounde. As an example, I would like to refer to the village of Nkoltara, a mere 15 miles north of the

<sup>13</sup>The World Bank, Operations Evaluation Department: Review of Republic of Cameroon 1996 CAS Completion Report, September 3, 2003.

<sup>14</sup>Interview with Monsignore Michel Busso, Bishop of Doba, Chad, conducted by Martin Zint, coordinator of the German Church-based NGO network Erdoel AG, Aix la Chapelle, France, June 27, 2006.

<sup>15</sup>International Advisory Group, Report of Mission 10 to Chad and Cameroon, September 25 to October 18, 2005, published on November 25, 2005, p. 7 (available at [www.gic-iag.org](http://www.gic-iag.org)).

<sup>16</sup>Ibid. p. 12.

<sup>17</sup>See, for example, the letter of July 24, 2005, from Erdoel AG, the German NGO working group including Germany's major Church-based organizations, to the World Bank, [www.erdoel-tschad.de](http://www.erdoel-tschad.de).

<sup>18</sup>Nekarmbaye Gedeon, interview with K. Horta, N'Djamena, Chad, 10 October 2005. Mapideh Kagmbayae, president of the Association of Human Rights (ADH), a human rights organization, has also received death threats.

<sup>19</sup>The World Bank, Inspection Panel Investigation Report, Cameroon: Petroleum Development and Pipeline Project and Petroleum Environment Capacity Enhancement Project, May 2003.

capital of Yaounde, where pipeline construction has had a devastating impact on the villagers.

The only source of water in the village is a small water hole adjacent to signs indicating the site where the pipeline is buried. The water seemed to be covered by a milky film of grease. Yet this is where ill-nourished children clothed in tattered rags were lining up with buckets of different sizes to fetch their families' water supplies (please see attached pictures). According to the villagers, skin rashes, gastrointestinal disorders, and other previously unknown ailments are now widespread in the community. When the villagers protested and demanded a new water source, the police came into the village, had everyone gather, strip, and get beaten.

Families with older children sent them to fetch water at a source a few miles away to have cleaner water. But carrying water over long distances is not compatible with attending school, which is also several miles away. One woman told me, on camera, that before pipeline construction, she was making enough money from raising chickens to afford to rent a room for her school-age children in the nearest town so that they could attend school. She was, however, unfortunate, in that some of the most intensive construction noise occurred in front of her house. As a result of that, the young chicks all died and she received no compensation to replace them. Now there is no money to rent a room for her children and since the distance to walk to school and back every day is just too long, the children are deprived of even a basic education.

Cameroonian NGOs have documented an extensive pattern of inadequate compensation and intimidation along the pipeline route and near its Atlantic Ocean terminal.<sup>20</sup> Some of the outstanding cases are now slowly getting resolved as a result of very competent local NGO research and advocacy efforts. Yet to date only a small percentage of claims has been processed and the IAG warns of a large backlog from year to year.<sup>21</sup>

*Public health.* It is well-known that transportation corridors in sub-Saharan Africa are a predominant route for the spread of HIV/AIDS on the continent. As noted by the Environmental Panel of Experts, which was established as a requirement of the World Bank's environmental assessment process, the construction of the Chad-Cameroon oil pipeline represented an ideal pattern for the transmission of HIV/AIDS along the pipeline route and in the oil fields in southern Chad.<sup>22</sup> The panel was especially concerned about the extremely extensive long-distance truck traffic between the port city of Douala and the oil fields in southern Chad. Accordingly, the panel ranked measures to minimize infection rates and treatment of HIV infections as the top priority for health management and called for extraordinary measures to be put in place to prevent a potentially catastrophic situation.

Yet problems of HIV/AIDS and other communicable diseases are not adequately being monitored, let alone addressed. In an article published in the Bulletin of the World Health Organization, a public health expert working on the project, William Jobin, expressed dismay at the failures. Jobin stated, "It appeared that in the project, decisions were largely based on cost and profit considerations, giving only passing attention to environmental and social aspects, and little or no decision-making power to the affected populations."<sup>23</sup>

#### 4. Environment

*Lack of adequate environmental assessment.* The World Bank's Inspection Panel carried out two separate investigations into possible violations of World Bank safeguard policies, one in Chad and a second one in Cameroon. In both cases, the inspection panel concluded that the World Bank had violated its operational policy on environmental assessment because the scope and magnitude of the project would have required undertaking cumulative, regional environmental assessments which were not done. In both countries, the panel also concluded that there was a lack of adequate baseline studies and a missing link between the existing environmental studies and subsequent mitigation plans.<sup>24</sup>

In Chad, among the problems affecting the oil-producing region are severe dust pollution with impacts on human health and crop fertility. The International Advi-

<sup>20</sup> See, for example, Center for Environment and Development/Relufa, Rapport sur les cas litigieux de compensation au long du pipeline, Yaounde, 2004.

<sup>21</sup> International Advisory Group, Report of Mission 11 to Cameroon, March 15–23, 2006, p. 2.

<sup>22</sup> Jobin, William, Health and Equity Impacts of a Large Oil Project in Africa, in: Bulletin of the World Health Organization, 2003, 81 (G).

<sup>23</sup> Ibid. p. 6.

<sup>24</sup> The World Bank Inspection Panel, Inspection Panel Investigation Report (INSP/R2002–2003, July 23, 2003, and Inspection Panel Investigations Report, Report No. 25734, May 2003.

sory Group also calls for the need to pay special attention to water and waste treatment as well as air pollution.<sup>25</sup>

In Cameroon, the pollution of local water sources along the pipeline route and the loss of local fisheries at the pipeline's marine terminal are amongst the problems cutting into the already precarious livelihoods of local communities.

*Indigenous peoples.* Neither Chad nor Cameroon recognizes the rights of indigenous peoples and neither has recognized the existence of indigenous peoples in their national territories.<sup>26</sup> This is of special concern given the serious and possibly irreversible problems faced by the indigenous and seminomadic Bagyeli pygmy people in Cameroon's coastal rain forest which the pipeline traverses.

The World Bank's policy on indigenous peoples (Operational Directive 4.20), which was in effect at the time of loan preparation, and until 2005 included provisions for World Bank assistance to borrowing governments whose laws were structurally weak concerning the recognition of the legal rights of local communities. But the World Bank did not assess the weaknesses of Cameroon's legal system in protecting the rights of indigenous peoples and no strengthening of the system took place.

The Indigenous Peoples' Plan prepared as a mandatory requirement of OD 4.20 was built on the assumption that there would be a long-term commitment by the Government of Cameroon to protect the indigenous communities affected by the project.

There has been no evidence of any such commitment to date. Furthermore, the Bagyeli were largely excluded from the preparation of the Indigenous Peoples Plan. As a result, the plan has a fundamental flaw: It does not address the need of land security for the Bagyeli, although land is critical to their survival as a group.

A Cameroonian foundation, FEDEC, was established with a trust fund of \$3 million from the oil consortium to finance both implementation of the Indigenous Peoples' Plan and the management of two national parks over the life of the project estimated at 28 years. The national parks of Campo Ma'an and Mbem-Djerem were created to offset biodiversity losses as a result of the pipeline. FEDEC's work, however, has been marred by internal conflict and continues to be largely ineffectual. According to the IAG's most recent report on Cameroon, FEDEC continues to lack strategic objectives and proper financial planning.<sup>27</sup>

*Expansion of oil exploration in Chad.* According to the loan agreements between the World Bank and Chad and Cameroon, all future oil exports using the pipeline will have to comply with the principles of the Environmental Management Plan developed for the initial three oil fields cofinanced by World Bank loans. So far there is no evidence that this requirement is being met. Exxon Mobil began pumping oil from new satellite fields in 2005. In addition, the consortium is conducting seismic testing beyond the Doba area in the East Doeso basin of the Sahr area of southern Chad. It also has requested a concession in the Maikeri area of the Logone region, while the Canadian Encana/Cliveden joint venture is continuing to explore and drill test wells in the Bongor area, the Lake Chad basin.

*Cameroon's planned Lom Pangar dam.* Incredibly, the Government of Cameroon is now seeking to build a dam whose reservoir would submerge part of the World Bank-financed pipeline and flood a biodiversity-rich forest that was put under protection to offset biodiversity losses as a result of pipeline construction. The government plans to construct the Lom Pangar dam on the Sanaga river in eastern Cameroon in order to increase energy supply to the country's existing electricity grid and the largest energy consumer, the Alucam Aluminum smelter. The World Bank has expressed concern over plans to build this dam especially because the reservoir created by the dam would submerge a section of the pipeline, which was not built to withstand such pressure, and it would flood a portion of the Deng Deng forest, a biodiversity hotspot which has been put under protection to compensate for losses of biodiversity as a result of the oil pipeline construction. The pipeline was rerouted to avoid going through the central Deng Deng forest area. The World Bank and the Government of Cameroon have an obligation to ensure not only pipeline safety but also to uphold the protection of the Deng Deng.

<sup>25</sup> International Advisory Group, Work Plan, Update, June 26, 2006.

<sup>26</sup> The Chadian, and Cameroonian Governments have not signed international conventions concerning indigenous and tribal peoples such as the Convention No. 169 of the International Labor Organization, which entered into force in 1991.

<sup>27</sup> International Advisory Group, Report of Mission 11 to Cameroon, March 15–23, 2006, p. 4.

IV. THE NEED FOR IMPROVED REVENUE DESIGN TO MAXIMIZE BENEFITS FOR THE PEOPLE OF CHAD AND CAMEROON AND MITIGATION MEASURES FOR THE AFFECTED PEOPLE AND ENVIRONMENT

*Revenue management*

*Cameroon.* Unlike in Chad, the World Bank did not insist on special provisions to ensure that royalties from pipeline operation are earmarked for poverty reduction. However, the World Bank should require the establishment of a transparent revenue system to ensure that royalties are used for the mitigation of negative impacts on affected communities and the environment before remaining royalties enter the stream of overall government revenues.

*Chad.* The World Bank currently is negotiating a new framework revenue management law with Chad and an agreement is scheduled to be completed by the end of September 2006. The opportunity should be seized to improve upon the original law imposed on Chad by ensuring that earnings from all oil operations in Chad (including new oil developments which are already underway, as well as the substantial indirect revenues, such as customs duties and taxes) from the oil sector are covered by the transparency and revenue management requirements aimed at promoting poverty reduction. It is vital that systems are put in place to ensure proper use for indirect revenues, since they will soon outweigh income from royalties on oil production. In 2007, it is estimated that Chad will earn \$1.5 billion in indirect revenues from the oil consortium, amounting to a near tripling of the country's national budget. In addition, the new framework should strengthen the role of the oversight committee and ensure that it has the necessary resources and information to carry out its tasks. Finally, the government should disclose the contractual agreements with oil companies investing in the country.

*Public health.* As a matter of urgency, the World Bank should carry out a long-overdue assessment of HIV/AIDS and other communicable diseases along the pipeline route and in the oil fields. This is critical to ensure that urgent remedial actions are undertaken to impede the further spread of the disease throughout both Chad and Cameroon and to provide effective treatment to those already infected. The now largely demobilized workforce and the movement of work camp followers call for additional measures to track and address the spread of the disease to regions where these people may have returned or migrated after conclusion of the major public works components of the project.

*Unresolved social and environmental problems.* The World Bank needs to appoint core staff responsible for solving the numerous unresolved environmental and social issues, including the plight of the indigenous Bagyeli people. Frequent staff turnover at the bank has contributed to the difficulties in getting things done on the ground.

*New oil exploration.* There is no evidence to date that there is compliance with the requirement that all new oil development respect the social and environmental standards of the Environmental Management Plan despite increased exploration and the development of new oil fields. The World Bank has to hold the government and oil companies accountable for commitments made.

*National dialog in Chad.* Authoritarian regimes and oil wells are a combustible mix. Violent conflict continues to threaten Chad as armed uprisings occur in several regions, including near the country's borders with Sudan and with the Central African Republic. It is urgent to reduce any further potential for conflict which otherwise might yet engulf the entire region.

A broad coalition of Chadian civil society organizations, including the churches, has launched an initiative for a peace and reconciliation dialog as an alternative to the specter of increasing violence. Such a national dialog has to bring the government, rebel groups, and other interested parties to the same table in order to prepare genuine democratic reforms. According to long-term observers of Chad, it is fair to say that the initiative has wide support among the Chadian population, which does not wish to see a dictator replaced by another war lord.

Such a national dialog needs to be mediated and supported by the international community, including the World Bank.

V. LESSONS TO BE DRAWN FOR WORLD BANK SUPPORT FOR EXTRACTIVE INDUSTRIES

The World Bank had claimed that the Chad-Cameroon Project represents a new approach for investments in extractive industries, not only because of its initiatives with regard to revenue management, but also because its involvement helps ensure



that the project is implemented in an environmentally and socially responsible manner.<sup>28</sup>

The World Bank can claim good intentions. But the long record of extractive industries in countries with weak governance where local communities have been impoverished, the environment destroyed, and the revenues disappeared should have led to a better analysis of the risks involved. In addition to continued efforts to correct what has gone wrong, it is also critical to draw lessons from the Chad-Cameroon project for investments in extractive industries more broadly.

Unfortunately, the lessons are not new. They were clearly articulated by the World Bank commissioned Extractive Industries Review (EIR), a 3-year, independent evaluation of the impact of World Bank Group support for oil, gas, and mineral development which was completed in 2003.

The final EIR report concluded that where basic conditions of good governance are absent, extractive industries have neither a record nor hope of contributing to poverty reduction.<sup>29</sup>

One of the report's central recommendations to the World Bank Group is the adoption of a phased approach: Basic human rights protections and some level of demonstrated institutional capacity to manage revenues as well as the environmental and social impacts must be in place before launching large-scale extractive industry investments.

Similarly, the World Bank's own Operations Evaluations Department (OED) identified in 2003 that the quality of governance as the key factor in determining project success ". . . good governance is the prerequisite for enhancing the positive linkage between increased fiscal revenue flows and sustainable development."<sup>30</sup> (Emphasis added.)

In its evaluation of the role of governance in activities related to extractive industries, OED concluded that: "Without the rule of law, the government is unable to implement legal, regulatory, and policy solutions that would allow it to control the costs and risks. There does not seem to be much of an argument in favor of developing or expanding the EI sectors in such environments."<sup>31</sup> The OED adds: ". . . no current bank analytic product allows an evaluation of the rule of law . . ." <sup>32</sup>

In response to the EIR and OED recommendations, the World Bank Group must begin by engaging in a transparent, public process to define minimum good governance criteria and to clearly link decision-making around project and policy support to those criteria. In the absence of basic governance conditions, respect for human rights and functioning mechanisms for citizens to hold their government accountable, projects which aim to increase revenues to the state while creating environmental, social, and political risks have little hope of contributing to poverty reduction.

*Linking monitoring with accountability.* The experience of the Chad-Cameroon project also highlights the need to ensure that independent monitoring mechanisms, such as the International Advisory Group (IAG), have the authority and means to ensure adequate follow-up to their recommendations. While the IAG has served as an important critical observer of the project's implementation, the fact that it has repeated many of the same recommendations in its reports over the years indicates that they have resulted in little concrete action. The design of future monitoring mechanisms should be informed by lessons from this project and establish a link between monitoring and mechanisms for accountability to ensure that findings are adequately addressed.

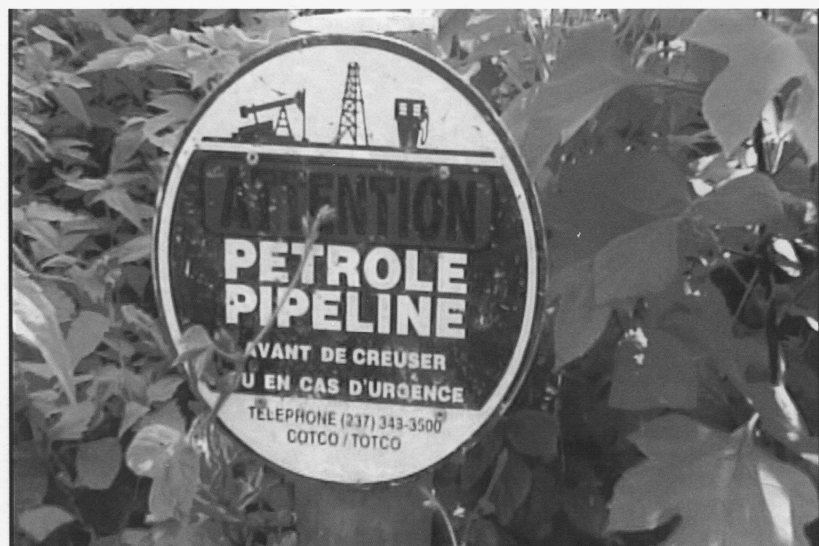
<sup>28</sup> World Bank press release, Oct. 10, 2003.

<sup>29</sup> Public reaction against the negative social, environmental, and economic impacts associated with many EI projects prompted the bank to reexamine its role in these sectors. In 2001, pressure from civil society finally led the bank's management to initiate the EIR, a multi-stakeholder process that sought to assess the bank's involvement in EI to date, and determine the appropriate level of involvement in the future. The central question posed by the review was whether bank supported EI investments can produce dividends that benefit the poor, while managing, minimizing, and justifying their social and environmental risks.

<sup>30</sup> Operations Evaluation Department, "Extractive Industries and Sustainable Development—An Evaluation of World Bank Group Experience," Washington, DC, 2003, 7.

<sup>31</sup> Operations Evaluation Department, "Evaluation of the World Bank Group's Activities in the Extractive Industries—Factoring in Governance," Washington, DC, September 1, 2004, 7.

<sup>32</sup> *Ibid.* 23.



*Sign near water well for village of Nkoltara, October 2005.*



*The polluted well of Nkoltara village located near the pipeline, October 2005.*



*Children of Nkoltara village, October 2005*



*Children of Nkoltara village, October 2005*

The CHAIRMAN. Thank you very much, Dr. Horta.  
I would like to call now upon Mr. Bapna for his testimony.

**STATEMENT OF MANISH BAPNA, EXECUTIVE DIRECTOR, BANK  
INFORMATION CENTER, WASHINGTON, DC**

Mr. BAPNA. Good morning. I would like to join others in thanking you, Mr. Chairman, for the leadership you and your staff have

demonstrated in helping fight corruption and improve development effectiveness at the multilateral development banks.

I speak as someone familiar with infrastructure from both sides of the street. I was a task manager and economist at the World Bank for many years, working on infrastructure, and I am now the executive director of the Bank Information Center. BIC has monitored infrastructure projects financed by these development banks for almost 20 years.

I would like to start by sharing a few simple facts about infrastructure that have helped shape some recommendations that I will offer. First, improving access to basic infrastructure services is essential to reducing poverty. Over 2.7 billion people live on less than \$2 a day, 1.6 billion lack access to electricity, and 1.1 billion lack access to clean water. The issue before us is not if infrastructure is important, but what type of infrastructure is critical, for whom is the infrastructure intended, and how should decisions on infrastructure priorities and projects be reached?

The term "infrastructure" encompasses a wide array of investments that have varying impacts on improving household incomes and reducing poverty. Some infrastructure promotes economic growth, while others focus on increasing access for the poor. Infrastructure can be a single large project or hundreds of small village-based projects. Project design and implementation can be centralized or decentralized. Infrastructure can be high-risk or low-risk in nature. It can be for domestic use or it can be for exports. And it is more than just bricks and mortar investments. Infrastructure services can also be provided through policy and institutional reforms.

Within this I would like to draw a particular distinction between capital-intensive, export-oriented projects such as oil and gas pipelines and infrastructure projects that are built to provide basic services to a variety of domestic users. There is a compelling, decades-long record of the failures of many large, high-risk infrastructure projects to reduce poverty on the ground.

Public controversy has historically centered on large, high-risk, export-oriented infrastructure developments, particularly in the energy sector. We have heard today from experts on Chad-Cameroon and Camisea. I argue that these are not the exceptions but more the rule. I provide a list of 10 such large, high-risk, controversial projects with questionable impacts on poverty that have been recently financed by multilateral development banks in my written testimony.

A fourth fact is that politics, not poverty, often drives the current push for large, high-risk infrastructure. The fundamental problem is a lack of political will. How do we generate the will to strike the right balance between different types of and approaches to infrastructure, to implement the lessons learned from earlier infrastructure mistakes, and to act upon recommendations articulated in previous committee hearings on the multilateral development banks?

Conceptually, what is needed to improve the role of infrastructure in reducing poverty is a radical shift in the portfolio from high-risk, export-oriented infrastructure to pro-poor, decentralized, smart infrastructure. And I define smart infrastructure as providing more direct and immediate benefits to the poor; as helping

ensure a more prominent role of users in all stages of the project cycle, infrastructure that is more amenable to transparency and accountability and less susceptible to large-scale corruption, although close scrutiny will still be required. It is able to generate more local employment, sustained employment, and technical capacity more easily. And typically it is smaller in size and scale, and at times even lower in cost. Sometimes small is indeed beautiful.

The radical shift to smart infrastructure is not to suggest that large infrastructure is unnecessary to reducing poverty. Certain types of large infrastructure remain vitally important, and the development banks should invest in this area, but they must do so responsibly. My written testimony includes a more expanded treatment of recommendations, but I would like to highlight a few that would help encourage the shift to smart infrastructure and help ensure that large infrastructure actually delivers positive development outcomes.

First, explicit sector/subsector lending targets to promote pro-poor, smart infrastructure should be established. The World Bank has stated that it aims to increase overall infrastructure lending to \$10 billion a year or 40 percent of its overall portfolio by 2008. What would be useful is if these lending targets were further disaggregated to indicate what percentage of their infrastructure investments would be allocated to pro-poor smart infrastructure versus other capital-intensive or export-oriented projects. The use of lending targets may be a blunt tool, but it has proven to be particularly effective in encouraging shifts in the portfolios of development banks.

Second, a comprehensive and participatory options assessment should be conducted before a decision is made to proceed with any large infrastructure program or project. The main reason large infrastructure fails to deliver benefits to the poor is because the wrong project was originally selected and financed.

The problem lies in the process. Projects are identified without adequately assessing the full range of policy, institutional and technical options that are relevant to addressing the identified need. Participatory and transparent options assessments, when conducted properly, are an effective way to reduce this risk.

Third, MDBs should develop sector-specific anticorruption guidelines for infrastructure. On the one hand, MDBs are ramping up investment in infrastructure. On the other hand, they are attempting to fight corruption, and we know that infrastructure is particularly prone to corruption.

We also know that multilateral development banks lent \$20 billion in infrastructure in 2005. If we conservatively assume that 15 to 20 percent of this lending was lost through corruption, we're talking about \$3 to \$4 billion lost to corruption from infrastructure investments. The rationale for formulating sector-specific anticorruption measures to resolve this therefore becomes readily apparent.

The World Bank is in the process of developing an anticorruption in governance framework to help guide its future operations. As part of these efforts, the Bank should develop more specific anticorruption guidelines for those sectors especially prone to corruption.

And, last, a small, truly independent evaluation unit to measure the poverty impacts of infrastructure lending should be set up. This recommendation follows the unambiguous conclusion reached in the previous committee hearing on the need for real independence and objectivity in the evaluation process. A pilot initiative could be designed to evaluate a sample of infrastructure projects approved by development banks over a 3-year period, the results of which can provide concrete guidelines on how to improve the poverty impacts of infrastructure and how to put in place more effective monitoring and evaluation systems to measure the results of future infrastructure investments.

I would like to conclude by saying that the committee has been particularly successful in elevating the issue of corruption on the development agenda, and it is our hope that it will be equally successful in catalyzing serious reflection and reform in the infrastructure lending practices and policies of the multilateral development banks. I thank you for your time and attention.

[The prepared statement of Mr. Bapna follows:]

PREPARED STATEMENT OF MANISH BAPNA, EXECUTIVE DIRECTOR, BANK INFORMATION CENTER, WASHINGTON, DC

It is an honor to be invited to share my views on the role that infrastructure can play to reduce poverty and improve development outcomes in MDB-financed operations. I would like to thank you, Mr. Chairman, and members of the committee, for the leadership you and your staff have demonstrated in advancing dialog on the important role of multilateral development banks (MDBs) in international development and the challenges that these global institutions face in fulfilling their missions to alleviate poverty.

I am testifying today on behalf of a number of U.S.-based nongovernmental organizations: Bank Information Center, Environmental Defense, and International Rivers Network. I am the executive director of the Bank Information Center (BIC). BIC partners with civil society in developing and transition countries to influence the World Bank and other international financial institutions (IFIs) to promote social and economic justice and ecological sustainability. BIC is an independent, nonprofit, nongovernmental organization that advocates for the protection of rights, participation, transparency, and public accountability in the governance and operations of the World Bank, regional development banks, and IMF.

CONTEXT

Improving access to basic infrastructure services is essential to reducing poverty. Basic infrastructure is critical to reducing poverty and achieving the Millennium Development Goals. Over 2.7 billion people live on less than \$2 a day, 1.6 billion lack access to electricity, and 1.1 billion lack access to clean water. "Examples of Smart Infrastructure Projects Financed by MDBs" provides some indicators on access to basic infrastructure services (see Additional Materials section at end of hearing). The issue before us is not whether infrastructure is important but what type of infrastructure is critical; for whom the infrastructure is intended; and how should decisions on infrastructure priorities and projects be reached?

A concise definition for infrastructure is all the facilities used to deliver energy and minerals, water and sanitation, telecommunication and transport services. However, this simple definition masks a wide array of investments that have varying impacts on improving household incomes and reducing poverty. To help understand this diversity, infrastructure investments can be unbundled along a number of different criteria. Some investments focus on promoting economic growth while others target enhanced access by the poor. Infrastructure can be a single large project or hundreds of small projects; project design and implementation can be centralized or decentralized. Infrastructure can be high risk or low risk in nature. Infrastructure can provide products or services for domestic use or for exports through an enclave arrangement. Also important, infrastructure services refer to more than just bricks-and-mortar investments. Infrastructure services can also be provided through policy and institutional reforms such as creating an enabling environment to transfer irri-

gation management from the state to village-level water user organizations or instituting demand-side management regulations for energy consumption.

An important distinction needs to be drawn between capital-intensive, commodity export projects that require large transport systems to evacuate their product (such as oil and gas pipelines), and infrastructure projects that are built to provide basic services to a variety of users. While both are labeled “infrastructure,” the central difference is that in the case of the former, the primary “development” benefits to the host country are almost entirely in the form of revenues to the government, while in the latter, the benefits may come in a variety of forms, including improved public access to transportation systems, electrification, water and sanitation services, increased industrial capacity for a variety of domestic sectors, as well as revenues to the state. The need for and potential benefits of the latter are evident in developing countries (see table 1). The case for the former, however, is much more debatable, as the impact of increased revenue generation on growth and poverty reduction depends upon the will and capacity of a government to use revenues effectively for the benefit of its people.

Table 1: Basic Infrastructure Indicators

Region	AFR	EAP	ECA	LCR	MNA	SAR
Population (millions) .....	674	1,823	474	518	300	1,378
% living on less than \$1 a day .....	46	15	4	10	2	31
% urban population .....	36	43	65	77	59	28
Major Access Indicators						
Electricity (% of population with access to network) .....	24	88	99	89	92	43
Water (% of population with access to improved sources) .....	58	78	91	89	88	84
Sanitation (% of population with access to improved sanitation) .....	36	49	82	74	75	35
Roads (% of rural pop. living within 2 kms of an all-season road) .....	34	95	77	54	51	65

Sources: World Bank (2006), WDI (2001, 2002, 2003); International Energy Agency (2002, 2004).

Infrastructure is by far the largest sector financed by the MDBs. Infrastructure lending in 2005 amounted to US \$20.2 billion representing about XX percent of overall MDB assistance (see table 2). The ADB, in particular, invests heavily in infrastructure at close to 60 percent of overall lending. The World Bank still accounts for 43 percent of overall MDB infrastructure commitments with the ADB and IDB at about 20 percent each. Infrastructure also spans multiple sector units at the MDBs. Transportation accounts for a third of World Bank infrastructure commitments with the rest roughly split between water and sanitation, urban development, and energy (see graphs).

Table 2: MDB Infrastructure Lending (2005)

[Dollars in billions]

Development Bank	Infrastructure lending	Total lending	% of total
AfDB .....	\$1.1	\$2.5	44
ADB .....	\$4.4	\$7.4	60
IDB .....	\$3.1	\$7.2	43
EBRD .....	€2.0	€4.3	
USD .....	\$2.4	\$5.2	46
WB .....	\$9.2	\$22.3	41

Source: 2005 Annual Reports of World Bank, ADB, IDB, EBRD and AfDB.

AfDB: Agriculture and Rural Development (20%), Communications, Power Supply, Water Supply and Sanitation, Transport, Industry, Mining and Quarrying, Urban Development.

ADB: Transportation and Telecommunications, Energy, Water Supply, Sanitation, and Waste Management.

EBRD: Infrastructure (municipal infrastructure, transport), Energy, Manufacturing (20%), Agribusiness (20%) and Telecommunications.

IDB: Energy, Transportation and Communication, Industry, Mining and Tourism, Multisector Credit and Preinvestment, Productive Infrastructure, Water and Sanitation, Urban Development and Social Investment (25%).

World Bank: Water, Sanitation and Flood Protection, Energy and Mining, Information and Communication, Urban Development, Transportation.

But there is a compelling decades-long record of the failures of many large, high-risk infrastructure projects to produce positive development outcomes. Controversy has historically centered on large, high-risk, export-oriented infrastructure developments, particularly in the energy sector (e.g., Chad-Cameroon, Camisea). These projects are premised on promoting growth through revenue generation for the central government and rely on the “trickle-down theory” for poverty reduction. Their success depends upon the existence of transparent and accountable public revenue

management systems to translate increased fiscal revenues into pro-poor investments. Often, they are enclave infrastructure projects that generate few permanent jobs and create only minimal spillover economic benefits for local business. Sadly, these types of infrastructure projects have rarely succeeded in reducing poverty or contributing positively to sustainable development (details in next section).

Evidence of these past failures are common. In a refreshingly candid report on lessons learned from past infrastructure lending, the World Bank recently remarked: “Infrastructure is complex, controversial, and often risky. There is potential for white elephants, environmental damage, loss of livelihood, and corruption. We know that because we’ve seen it, and we’ve been on the wrong side of the equation at times, making some mistakes along the way.”<sup>1</sup>

The World Bank organized a major development conference in Tokyo focused on infrastructure in May 2006. A key paper for the conference by Antonio Estache, senior economic adviser of the World Bank Infrastructure Network, states: “The most dramatic lesson the international infrastructure community may have learned is humility. This is because we have collectively found the limits of our knowledge on a wide variety of issues relevant to policymaking in infrastructure . . . There is, for instance, still a lot of uncertainty on how, and how much, infrastructure impacts growth . . . Without more and better data on these dimensions of infrastructure service delivery, there will be no accountability in the sector. So far, when accountability has failed, the poorest users and the taxpayers have tended to bear the bulk of the costs of poor service and of corruption.”<sup>2</sup>

The World Bank’s acknowledgement of the complexity and risk of infrastructure projects reinforces the findings of two major multi-stakeholder reviews: The World Commission on Dams (WCD) and the Extractive Industries Review (EIR). The WCD (2000) and the EIR (2003) provide a rigorous framework and recommendations on how dams and extractive industries should be developed and the appropriate role for the World Bank in these sectors. The strategic priorities, principles, and guidelines contained in these reports are also relevant for infrastructure, more generally. In turn, these reports have benefited from the active and in-depth monitoring of infrastructure projects undertaken by civil society and academics over the past three decades.

However, the World Bank has rejected several key findings and recommendations on dams and extractive industries emerging from these reviews. Despite commissioning these multi-stakeholder reviews, the World Bank has refused to accept many of the most important recommendations of the reports and has instead proposed watered-down reforms, cherry-picking only those recommendations that it endorses. That said, one of the important recommendations it has accepted is on improving revenue and contract transparency—which are essential if export-oriented infrastructure projects are to succeed.

Politics, not poverty, drives the current push for large, high-risk infrastructure at the MDBs. The problems posed by large, high-risk infrastructure, centralized approaches to infrastructure delivery, and the excessive faith in the private sector to provide basic, affordable infrastructure to the poor have been well documented. Yet the pressure to ramp up such infrastructure lending continues unabated. This suggests that lessons learned from past mistakes have not yet been internalized and translated into concrete improvements in what sectors are prioritized, what projects are selected, and in the design and implementation of individual projects. Understanding the politics behind the drive for large, high-risk infrastructure—at the expense of others forms of “smart infrastructure” (defined below)—may help explain this disconnect.

Several powerful interests stand to gain under the current scenario. The Ministry of Finance and Ministry of Industry/Energy in large borrowing countries often request financial support for large-scale, controversial infrastructure—as these projects tend to serve broader political objectives. The boards of directors and senior management of MDBs are keen to lend money—preferably in large tranches. Many bureaucrats and politicians gain handsomely through widespread corruption associated with large infrastructure. Multinational and domestic firms also benefit from sizeable and lucrative supply and construction contracts associated with capital-intensive infrastructure projects. Finally, MDB macroeconomists stubbornly adhere to the belief that big projects promote growth and this type of growth is most effective in reducing poverty. It is in this political context that the challenges of promoting a pro-poor infrastructure agenda must be understood.

<sup>1</sup>“Shaping Up Infrastructure: Building on Strengths, Learning From Mistakes,” World Bank, 2006.

<sup>2</sup>Estache, Antonio, “Infrastructure: A Survey of Recent and Upcoming Issues,” World Bank, 2006.



Ultimately, the fundamental problem is one of political will. How do we generate the will to strike the right balance between different types of and approaches to infrastructure; to implement lessons learned from earlier infrastructure mistakes; and to act upon recommendations articulated in previous Senate Foreign Relations Committee hearings on the MDBs? Recognizing that certain types of infrastructure projects are more successful in reducing poverty than others is critical to determining what priorities MDBs should embrace in their infrastructure lending. The testimony below distills some of the most significant problems associated with large, high-risk infrastructure. It then calls for a radical shift toward pro-poor, smart infrastructure and provides specific policy and project recommendations for MDBs to adopt.

#### WHY DO LARGE, HIGH-RISK INFRASTRUCTURE PROJECTS FAIL SO OFTEN?

Large, high-risk infrastructure projects rarely improve the livelihoods of affected communities or the poor more generally in a sustained and equitable way. There are no doubt exceptions but several independent project and sector-level evaluations of controversial infrastructure projects confirm this finding. The genesis of the World Commission on Dams and Extractives Industry Review was in part an explicit recognition of the inability of high-risk infrastructure (often energy-export projects) to deliver positive development outcomes. A summary of the development impacts and risks of major infrastructure projects recently financed by MDBs is provided in Annex 1 (see Additional Material section at end of hearing). This list is telling in that high-risk infrastructure constructed without adequate due diligence and safeguards continues to be promoted by MDBs despite lessons learned from past projects.

Five special, significant risks emerge from this list that help explain why these projects often fail:

*1. Flawed project selection:* The story of large infrastructure is often a story of power. Large infrastructure often fails to benefit the poor because the wrong projects were initially selected and financed. Decision making processes in most countries for identifying infrastructure lack transparency and accountability. Powerful, vested interests determine which projects are financed and how they are designed (with little regard to their impact on poverty). Purported beneficiaries and the general public rarely have seats at the table. A fair, informed, and transparent decision making process, based on the acknowledgement and protection of existing rights and entitlements, would give all stakeholders the opportunity to fully and actively participate in the decision. Few, if any, of the projects listed below could meet this criterion set out by the World Commission on Dams.

MDBs argue that controversial high-risk infrastructure projects are often promoted by their clients. Should MDBs interfere in domestic decision making processes? What about country ownership, they ask. The problem with this response is that the client is often narrowly interpreted as the Ministry of Finance (MoF) or Ministry of Industry (MoI); “country” ownership rarely includes other ministries or line departments, affected communities, elected officials, or the public at large. MDBs should ensure that meaningful participatory processes have been followed in identifying priority infrastructure before agreeing to consider such requests for development assistance.

*2. Inadequate governance:* The necessary governance conditions are often not in place to enable large, high-risk infrastructure projects to contribute to growth and poverty reduction. For example, government must have the regulatory capacity to monitor and mitigate a project’s environmental and social impacts, as well as the administrative capacity and political will to manage revenues in the interest of the poor. Without minimum conditions such as the rule of law, fiscal transparency, a functioning independent judiciary, and free press, citizens lack the means to hold their governments accountable to poverty reduction goals and social and environmental standards, or to seek redress for grievances when rights are violated in the context of large, high-risk infrastructure projects. The quality of governance is an even more significant factor for export-oriented projects whose expected development benefits stem principally from their contribution to government revenue, rather than employment generation or enhanced local access to services. The World Bank’s own Operations Evaluation Department (OED) has identified governance as a crucial factor to determining the success of these types of large projects in reducing poverty: “. . . good governance is the prerequisite for enhancing the positive linkage

between increased fiscal revenue flows and sustainable development.”<sup>3</sup> Although it is unrealistic to wait for perfect governance conditions before investing in large infrastructure projects, some minimum governance conditions and basic capacity must be in place, to help ensure that infrastructure investments benefit the poor, and that the local population is not left to bear environmental and social costs.

3. *Susceptibility to corruption*: Certain characteristics of large infrastructure—natural monopolies capable of generating large rents, big construction and management contracts, etc.—make it particularly prone to corruption. According to the World Bank, about half of its anticorruption investigations that led to corrective actions are infrastructure projects. Corruption has manifested itself in several MDB-financed projects listed below including perhaps most dramatically in the Samut Prakarn Wastewater Management project. Corruption undermines development effectiveness. It can result in the approval of unnecessary or suboptimal projects; overly complex project designs; excessive project costs; and reduced user revenues. Recent attention on combating corruption at the MDBs is welcome but the inherent susceptibility of large infrastructure to corruption cannot be easily overcome. Thus, there is an apparent contradiction between anticorruption efforts at the MDBs and their simultaneous commitments to ramping up investment in large infrastructure.

4. *Disproportionate impacts on local communities and the environment*: A key risk confronting most large-scale infrastructure is the inequitable distribution of benefits and costs. Social and environmental costs such as physical or economic displacement, conversion of natural habitats, water and soil contamination, etc., almost always fall upon affected communities located in or near the project area. These communities are often the most vulnerable and least able to withstand these costs. Such impacts often spark social opposition to the infrastructure project, which can at times stop or delay the project threatening the wider benefits that the project claims to provide. In the case of large, export-oriented infrastructure whose development impact depends on the use of the revenues they generate for the state, local communities often feel they don’t receive their fair share of the benefits, to the extent they receive concrete benefits at all. Free, prior, and informed consent should be adopted as a guiding principle, especially for indigenous groups, to help ensure that at a minimum, the poor who live in the project area benefit from such major investments.

5. *Shoddy economic and financial analysis*: Many large infrastructure projects fail to deliver the benefits originally claimed because of faulty economic and financial analysis. Cost-benefit analyses tend to overestimate revenues and underestimate costs (e.g., Yacyreta project). Risks are rarely identified and appropriately taken into account when calculating rates of return. Concession agreements and project contracts tend to favor large multinational companies with key risks usually assumed by host governments. Economic analyses of large infrastructure projects should be disclosed and subjected to public scrutiny as part of the deliberative public decision making process. This will help ensure that the most viable infrastructure projects are approved.

High-risk infrastructure receives a disproportionate share of management and staff time that is often not commensurate with the projected rewards. In addition to the above risks, the opportunity cost of the financial and staff resources devoted to approving and supervising controversial infrastructure cannot be overestimated. Not only is concessional financing displaced from more viable projects but also staff time that could be more effectively deployed to support pro-poor infrastructure. One can only imagine what innovative, smart infrastructure (defined below) projects could have been implemented in Chad or Lao PDR if resources deployed in preparing the Chad-Cameroon pipeline or Nam Theun 2 dam were channeled into simpler projects with more direct and immediate impacts on poverty.

#### WHAT IS NEEDED? A RADICAL SHIFT TOWARD PRO-POOR, “SMART INFRASTRUCTURE”

In order to improve their contribution to development, MDBs must embrace pro-poor, decentralized infrastructure much more vigorously. A significant shift in the portfolio is required from high-risk, capital intensive (often enclave) infrastructure to pro-poor, “smart infrastructure.” I define “smart infrastructure” as pro-poor, decentralized, and typically small in scale. Compared to high-risk, export-oriented projects, it provides more direct and immediate pathways to reducing poverty. “Smart infrastructure” is also more likely to be equitable and sustainable. Characteristics of smart infrastructure include:

- More direct and tangible benefits to poor households and communities.

<sup>3</sup>Operations Evaluation Department, “Extractive Industries and Sustainable Development—An Evaluation of World Bank Group Experience,” Washington, DC, 2003, p. 7

- Decentralized approaches for project design, implementation, operation, and maintenance.
- Prominent role of users in all stages of the project cycle and the role of local governments.
- More amenable to greater transparency and accountability.
- Smaller in size and scale, compared to large national or regional projects.
- Ability to generate local employment and technical capacity/know-how.
- Less susceptible to large-scale corruption but close scrutiny still required given widespread petty corruption often associated with small civil works.

Smart infrastructure also includes investments in promoting efficiency gains from existing infrastructure as opposed to building new infrastructure. The World Bank recognizes that the challenge is striking the right balance in these different types of infrastructure investments. Unfortunately, the current political context and power dynamics prevent a more optimal mix of investments from being supported by MDBs.

Good examples of pro-poor, smart infrastructure financed by MDBs already exist. Examples of smart infrastructure include integrated watershed development; rural and urban water and sanitation; rural access roads; run-of-the-river hydroelectric projects; renewable energy; off grid electrification; traditional water harvesting and irrigations systems; community-level common property infrastructure; etc. MDBs are already supporting these types of projects but need to significantly ramp up their investments in these areas. (Good examples of smart infrastructure projects financed by MDBs are provided in the Additional Material section at the end of the hearing.)

The radical shift to smart infrastructure is not to suggest that large infrastructure is unnecessary to reducing poverty. Certain types of large, trunk infrastructure remain important and the MDBs should invest in this area subject to recommendations presented in the Additional Material section at the end of the hearing.

#### SPECIFIC POLICY AND PROJECT RECOMMENDATIONS TO BE ADOPTED BY MDBS

The recommendations below are intended to help improve the development effectiveness of infrastructure financed by MDBs. Political commitment is an absolute prerequisite to real change—where the commitment is in place, the recommendations can be usefully taken up, but without it there is little hope for progress. I would also like to endorse the comprehensive set of priorities, principles, and guidelines put forward by the World Commission on Dams in 2000 and the Extractive Industries Review in 2003. Most of these recommendations apply equally well to the challenges facing infrastructure more generally at the MDBs.

The recommendations below are what I believe to be the most pivotal, concrete, and practical steps MDBs should adopt to improve its infrastructure lending:

1. *Establish explicit sector/subsector lending targets to promote pro-poor, smart infrastructure:* MDBs have adopted explicit lending targets for infrastructure. The World Bank, for example, has stated that it aims to increase infrastructure lending to US \$10 billion a year or 40 percent of the total bank lending by 2008. The World Bank, and other MDBs, should commit a certain substantial percentage of their infrastructure lending to pro-poor, smart infrastructure. This use of lending targets may be a blunt tool but it is particularly effective in encouraging a shift in the portfolio, diversifying away from capital-intensive or export-oriented projects. Key to the success of these targets is (a) clarity on which sectors and subsectors (e.g., small-scale irrigation, renewable energy) additional business should be encouraged and the types of projects that would be contained in these sectors, and (b) clarity on the methodology for calculating the baseline lending levels in each sector. Despite some definitional and methodological problems, the World Bank's recent commitment to increase lending in renewable energies could serve as an instructive example.

2. *Ensure that a comprehensive and participatory options assessment is conducted before a decision is made to proceed with any large infrastructure program or project.* The proposed solution should be based on an assessment of the full range of policy, institutional, and technical options to meet an identified need, such as increased electricity supply or improved access to markets. The leading reason large infrastructure fails to deliver benefits to the poor is because the wrong project was originally selected and financed. Options assessment—when conducted properly—is an effective way to reduce this risk.<sup>4</sup> All stakeholders should participate in the process

<sup>4</sup> MDBs typically require a Study of Alternatives as part of their due diligence for projects with major environmental and social impacts. The Study of Alternatives—despite sharing some objectives as an Options Assessment—has not been an effective tool. At best, these studies re-

Continued

but a particular emphasis must be placed on the role of potentially affected communities. Transparency and participation in the assessment will help ensure least-cost solutions are adopted; affected communities and the public benefit; and corruption is mitigated. Analyzing the distribution of benefits and costs should be an input into the process with due weight placed on social and environmental costs. If reducing poverty is the objective, emphasis should be placed on solutions (e.g., efficiency gains through rehabilitating existing infrastructure or demand side management) that deliver benefits most directly to the poor. The SFRC should request U.S. Treasury and the U.S. Executive Directors at the MDBs to insist that a rigorous options assessment is conducted prior to approval of (at a minimum) all large, high-risk infrastructure projects.

3. *Ensure minimum governance conditions and sectoral capacity before investing in infrastructure.* Proper sequencing of investments is crucial to ensuring their poverty reduction potential. Much as the EIR recommended with regard to oil, gas and mining projects, adequate core and sectoral governance criteria should be met prior to MDB support for large, high-risk infrastructure projects, and particularly those which are designed to generate revenues for the host government. Infrastructure projects whose poverty-reduction potential depends on revenue generation can only succeed in a context in which there are basic assurances of a minimum level of government accountability to the public. Such conditions include but are not limited to the rule of law, a functioning independent judiciary, fiscal transparency, a free press, and demonstrated respect for human rights. Given the heavy footprints and substantial risks associated with large-scale infrastructure projects, the host government needs to have the capacity to monitor, manage, and mitigate social and environmental impacts before an infrastructure investment is made. Numerous projects (and Chad-Cameroon, most vividly) illustrate the risk of supporting projects before such capacity is in place. It is much easier to construct a dam or pipeline than it is to build good governance. Often, the development of physical infrastructure far outpaces capacity-building efforts, and it is difficult, if not impossible, for government to “catch up,” let alone to remedy harms suffered while government regulation and oversight were absent.

4. *Develop sector-specific anticorruption guidelines.* Corruption is pervasive in infrastructure and MDBs are vigorously scaling up investments in this sector. Sector-specific anticorruption measures may help resolve this obvious contradiction. The World Bank (likely to be followed by other MDBs) is in the process of developing an anticorruption and governance framework to help guide its future operations. As part of these efforts, MDBs should develop more specific “nuts-and-bolts” anticorruption guidelines for sectors especially prone to corruption. Meaningful public participation in the formulation of these guidelines will be crucial to ensuring high quality and broad ownership.

5. *Strengthen protections of social and environmental rights of affected communities and the environment; upholding the highest international environmental and social rights and standards.* Recognition of rights is an important element in establishing the existing entitlements of adversely affected people at various locations. Existing entitlements are the basis for negotiating new entitlements. The project process must recognize a range of entitlements including the entitlement of affected parties to (i) participate in negotiating the outcomes of the options assessment process; (ii) participate in negotiating the implementation of the preferred option; and (iii) negotiate the nature and components of mitigation.<sup>5</sup> International standards and norms should be explicitly adopted by MDBs and recognized as the basis for existing entitlements. Most important are those related to human rights; no-go zones; free, prior, and informed consent; and core labor standards. Some progress has recently been made in tethering the development banks to these standards but much more is required. This has become even more pressing as some private banks and export credit agencies have actually surpassed the MDBs on certain topics.

6. *Establish minimum transparency and participation provisions throughout project implementation.* Public/community participation in monitoring and decision making over the life of an infrastructure project enhances outcomes. Currently, most MDBs do not require the disclosure of project information or public participation during project implementation. Because many problems, both anticipated and unforeseen, are encountered during project execution, affected communities and other

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sult in minor changes to project design; meaningful discussion of alternatives rarely happens. The Study of Alternatives takes place too late—after a project has already been selected and feasibility studies have started. Therefore, this in no way can replace a real Options Assessment, which is conducted prior to project identification.

<sup>5</sup>Recommendation contained almost verbatim in the World Commission on Dams final report, 2000.

stakeholders must be involved in identifying problems and selecting remedies, including changes in project design or oversight. MDBs should revise their information disclosure policies to establish minimum provisions for information disclosure and public participation during implementation. This will improve not only anticorruption efforts but also the development effectiveness of infrastructure projects.

7. *Require robust independent monitoring mechanisms for large-scale infrastructure projects.* One effective mechanism to help ensure risky infrastructure projects contribute to poverty reduction is to appoint a high-level panel of “eminent persons” to oversee the project during preparation and implementation. Chad-Cameroon and Nam Theun 2 are both examples for which international advisory groups were constituted. An impediment to the effectiveness of these panels, however, was that they lacked teeth—the ability to enforce their recommendations. In addition to requiring independent monitoring panels, MDBs should also establish links between monitoring and accountability mechanisms. This may help ensure that the findings and recommendations of monitoring bodies are acted upon. The public (in particular, affected communities) should be involved in the monitoring and the panel’s reports and recommendations should be disclosed simultaneously to all stakeholders.

8. *Promote certain policy or operational reforms and good practice guidelines to help create an enabling environment for smart infrastructure.* Lending in support of smart infrastructure is hampered at many MDBs because of operational or policy bottlenecks or the lack of clarity on some key content issues. A review of which obstacles impede additional MDB lending for smart infrastructure would be helpful. Possible reforms include:

- Promote the use of small, more flexible lending instruments (such as the Learning and Innovation Loan at the World Bank).
- Community procurement guidelines that allow users to select and monitor construction and technical assistance contracts. Active involvement of beneficiaries is by far the most effective way to shine a light on and prevent corruption. MDB procurement policies and guidelines should be reviewed to ensure that their approach to procurement is consistent with this objective and does not unfairly penalize community-level contracting.
- Promote transparency in project costs and fund flows during project implementation to combat corruption and improve quality of implementation. Information disclosure policies at the MDBs should ensure that disaggregated project costs for infrastructure projects are made available to the public.
- Ensure subsidies are in place for the poor before additional user fees for infrastructure are introduced. This is consistent with and should build off of recent U.S. legislation regarding user fees for social sector services.

9. *Alter staff incentives to focus on development effectiveness not lending volumes:* The pressure to lend at the development banks remains as strong as it has been in the past. This perverse incentive affects the type of infrastructure projects that are financed. Large commitments and disbursements are easier for large, trunk infrastructure and so a bias toward this type of investment exists. Reforming the overall incentive structure has proven to be more difficult than expected—in part, because existing incentives are in-built into the structure and processes of how the development banks operate and are protected by powerful voices on the board. The pressure to lend is most intense at the country level—for country directors and their leadership team. I would therefore argue that the most tactical place to tackle these misaligned incentives is with the country director. Truly independent audits of development effectiveness (and specifically the poverty impacts of infrastructure projects)—not lending volumes—at the country level need to be conducted. Performance evaluations of the country director (including benchmarks for promotions and layoffs) must be based in large part on these audits. The rationale for these independent audits at the country level is similar to the arguments put forward in the previous Senate FRC hearing on the MDBs. A specific intervention to shift management incentives at the country director level may be more acceptable and in the long run, may help catalyze wider reforms on staff incentives.

10. *Set up a small, independent evaluation unit to measure impacts of infrastructure lending in reducing poverty:* Donors to MDBs should establish a small, independent evaluation unit to examine the poverty impacts of infrastructure. This recommendation follows the unambiguous conclusion reached in the previous SFRC hearing by Easterly, Lerrick, and Levine on the need for real independence and objectivity in the evaluation process. A pilot initiative could be designed to evaluate a sample of infrastructure projects approved by MDBs over a 3-year period and based on the results to provide concrete guidelines on (a) how to improve the poverty impacts of infrastructure, and (b) how to put in place more effective monitoring

and evaluation systems to measure the results of infrastructure investments. Given the increasing significance of infrastructure to MDB portfolios, an independent audit on infrastructure would be a useful place to begin. Such a pilot may be politically more acceptable to the MDBs than a whole-scale and radical change to the so-called "independent" evaluation departments.

CONCLUDING REMARKS

I would like to thank you, Mr. Chairman, for the opportunity to share our views today on infrastructure, poverty, and the MDBs. I hope that the testimonies provide the committee with constructive and concrete ideas of how to improve the development effectiveness of infrastructure lending. Infrastructure represents the largest share of MDB commitments financed today and the share is increasing. The success of the MDBs in achieving their missions depends in large part on infrastructure projects improving the lives of the rural and urban poor.

This hearing reflects a positive evolution of the topics discussed before the SFRC. The committee has been particularly successful in elevating the issue of corruption on the development agenda; it is our hope that it will be equally successful in catalyzing serious reflection and reform in the infrastructure lending practices and policies of the MDBs.

The CHAIRMAN. Well, thank you very much, Mr. Bapna, for your testimony, and your extensive statement, which as you have indicated, gives the committee a lot of guidance from your experience.

Let me begin the questioning by simply noting—and I think the testimony that witnesses have given in their full statements clearly illustrates this, and this came through, I believe, in specific testimony—but in the Camisea natural gas project in Peru, the total cost, at least the committee is advised, was about \$1.7 billion. Now, the fact is that the Inter-American Development Bank's loan was \$135 million, so I think both of our first two witnesses have made the point correctly that obviously we are concerned today about the Inter-American Development Bank, the multilateral development bank situations, but in this particular case the bulk of the money came from somewhere else.

And that was clearly true once again in the second issue we're talking about today, the Chad-Cameroon affair, where about \$4.1 billion was invested, 85 percent by private companies. Then there were three loans from the World Bank essentially of various amounts. Perhaps this is consistent with Secretary Lowery's testimony. We went through a period of time in which a good number of large projects in developing countries occurred through the private sector.

Now, one reason that this is clearly the case in the energy field is that this is an extremely important field for almost every country in the world seeking a degree of energy security and/or advantage from the extraordinary increases in prices paid for natural gas and for oil, which makes a big difference in the economy of countries.

My friend, Tom Friedman of the New York Times, has written extensively about this, and we have been discussing his contention that as revenues from energy come into a country, the desire for democracy seems to diminish. Now, the desire may be there with the people as a whole, but not necessarily with the leadership of the country, given extraordinary new revenues and new possibilities for authority, even strategic use of those revenues to either reward or deprive other customers of their benefits.

We are intersecting here today an important issue about development and corruption, but likewise, a very big issue in our world

about the strategic use of energy and the political authority that comes in that respect, so I think we all understand that. The viewers of this hearing will not fear that we are in an esoteric intellectual atmosphere, oblivious of what is going on in the world. We understand these facts.

Now, having said that, however, the responsibility still falls upon the development banks for what their responsibilities are. And as Mr. Lowery from the Treasury said earlier, and other witnesses, and each of you in your own way, those responsibilities have been developing, some of us hope swifter rather than slower, but nevertheless there has been movement, hopefully stimulated somewhat by our hearings and all sorts of other hearings around the world, because I'm sure others are paying attention to this.

I'm curious, having said all of that, that you testified, Mr. Quijandria, that about 50 percent of the royalties from the Peru project go to the provinces, and 18 percent, as I gather, to the neighborhoods really, of the pipeline itself, those most affected by this. But I was struck by the thought that even after these revenues go to these provinces, presumably the local governments, authorities, whoever is responsible, the capacity to spend this money is suspect or maybe not existent.

In other words, what is the responsibility then for whether it is the World Bank or the Inter-American Development Bank to try to help build capacity? Is this an extension too far of the witness that should be there? Because it's an important point to make.

These are large sums of money that are flowing out to the provinces, but nevertheless the fact that they're heading out there does not necessarily mean that they may arrive to help the poor or the persons who are most deprived. It could very well be that the local governments are not all that competent, or worst still. Or even if they are earnest people trying to do a good job, the sophistication with regard to the use of that money, the management of it may simply not be there.

What, from your experience, do you have to say about that? How do we make a difference, so that even if there is a distribution—and I'm not advocating 50 percent—you are saying essentially the problem is that money is not being very well spent or maybe not even spent at all. Can you amplify further on that?

Mr. QUIJANDRIA. Yes, Mr. Chairman. I want just to give you a piece of information. We had Camisea as the main issue of cafe conversation and headlines of the newspaper for almost 20 years. We're discussing how to do Camisea.

The CHAIRMAN. I see. In Peru, it has been discussed for 20 years.

Mr. QUIJANDRIA. In Peru. The state company should do it. The whole of the benefits should go to the region. So the price the Peruvians, we have paid so far, is that high expectation of the Peru population, that there is no chance of doing any infrastructure project, mining, oil and gas, unless you compromise an important amount of revenues for that population. That's the turning point.

The CHAIRMAN. So that's the political expectation?

Mr. QUIJANDRIA. Yes.

The CHAIRMAN. You start out looking for natural gas. You anticipate that a big percentage is going to go to the poor through infrastructure.

Mr. QUIJANDRIA. They consider they own the reserve, they own the resources, so they are entitled to have an important part of revenues. The problem, Mr. Chairman, is that once we have internalized that and we have decided politically that that is the only way to develop infrastructure, now we have to build that capacity. We have to give them the means in order to spend that money.

And the World Bank and IDB, working probably in different regions, are working from the grassroots, giving the most basic tools to the municipalities, to regional governments which were created 3 years ago. Regional governments never existed in Peru. So now we have 24 regional governments with the bureaucracy which is probably oriented to handle services and not necessarily to construct infrastructure.

The CHAIRMAN. So this is 3 years old, the infrastructure, I mean the governments at the local level?

Mr. QUIJANDRIA. Yes.

The CHAIRMAN. And prior to that, the central government ran it all, essentially.

Mr. QUIJANDRIA. So we are in a learning process, Mr. Chairman, that probably will take some years. I don't think that it's going to be solved in a couple of years.

The CHAIRMAN. How does the World Bank intersect now with these new governments, the 3-year-old governments? How does that work?

Mr. QUIJANDRIA. First of all, Mr. Chairman, I think an early engagement is crucial. IDB and World Bank should be present hopefully in the design of the project. The problem with Camisea is that I praise very much the continuity of policy, but there is also costs of continuity.

We had to take a process which has already been negotiated through an international bidding process that this government couldn't change. Probably the solution was to say 44 months to construct this complex project is too little, let's extend it, but that was opening again.

And something that Camisea has got has been transparency. The government has been very clear to put all the figures on the Web, so you can go anytime, and that's the reason why people really are not satisfied, because they see that there is a lot of money waiting, and they are poor, they don't have services. As Mr. Herrera mentioned, 25 percent of the population doesn't have electricity service, and they say, "Why? There is money." Specifically the people from Cuzco, they are already receiving more than \$200 million so far and there are very little results, I have to admit.

The CHAIRMAN. So the local government of Cuzco is not able to plan or to execute, or why?

Mr. QUIJANDRIA. There were local, regional plans. There are no staff trained in order to carry out projects. Our national administrative standards are probably too high for provinces. We have to lower them, and specifically we have to do a lot of training.

The CHAIRMAN. That's a very important set of facts for all of us to consider. The development of local government, as you say, sort of a 3-year gestation period, suddenly \$200 million or whatever; and the staff; the expertise; and the new standards; everything that's anticipated by the poor, all coming upon these people.



You know, having been mayor of a city in our country, I understand the expectations of the people at the local level, but we had staff. We had an infrastructure of the business community and lots of other people to help. So as we're taking a look at these situations, whether it's Peru or Chad or Cameroon, it's important for us all in a much more sophisticated way to try and understand the governance of the countries, the development of that.

But, having said that, it is still a lot of money, and apparently maybe another project coming along which produces more money and therefore more expectations, I suspect.

Mr. QUIJANDRIA. Mr. Chairman, just for the record, IDB gave \$75 million to finance the project. CAF, which is the financial Andean corporation, gave \$50 million. \$300 million was provided by local private investors. But the leverage of IDB has been very high. Although they only participated with \$75 million, they practically compromised the whole consortium, even the downstream consortium, which was not involved in the financing, to accomplish certain levels to carry out environmental and social reforms.

The CHAIRMAN. Well, it's a very important point you have just illustrated again. I gave these figures, the total of \$1.7 and then over here \$135 million. As you say, the leverage from the \$135 million has engendered all of these attempts for reform, apparently.

So the international development banks were getting their money's worth in terms of the amount of participation to begin with. However, that's the job of the banks. That's the involvement here. If it had been totally private, we would not be talking about it today, I suspect. We do have this international development, including taxpayer money of the United States, of our own citizens, as they contribute to these banks.

Mr. Herrera, you mentioned at the outset of your testimony that as this proceeded, this \$1.7 billion investment, the objective was energy security for Peru. That doesn't mean that people didn't think about some good things that might happen in a humanitarian way and help poor people at the grassroots, but essentially your judgment is that by and large the Peru Government, as a people, were thinking about energy security, and so they built the pipeline.

Now, eventually some other loans came along in this process, but describe a little bit more from your own recognition, and both of the first two witnesses have been heavily involved in decision making in Peru. What sort of energy security did Peru need? Why was there an interest in this kind of investment or seeking it, from wherever it came?

Mr. HERRERA. Mr. Chairman, Peru has only, until now, only two significant sources of energy, of raw energy—I mean—oil and hydropower. So power can be fully completed, it's not advisable to do 100 percent, but it can theoretically be fully completed with hydropower. We have hydro resources much more than we will require now. But we don't have fuels, and the dependence of oil means a really strong constraint for economic growth of the country.

The only resource the country has in enough amount as far as to support political change of fuels, an energy matrix transformation, is Camisea, is the natural gas. That's why, in the compromises of natural gas, it was fully to export the liquids, but in

the case of the gas, the condition is that the gas could be exported only when the next 20 years of local market are ensured to supply, because if in some moment after a long wait that means to transform an energy matrix, we feel that we don't have enough gas, we will become importers, and in that case the situation is worse than being oil importers.

That's the point. And of course, together with this, but this is the main reason for the project, there were others. The project was committed in order to complete the high standards, the high international standards about environmental, about communities, about whatever.

The expectation of the people were great. All the problems of noncapacity for expending the money and so on were known well in advance. Something must be done, since the beginning of the project, in order to arrive at the goals at the same time being developed the capacity of using that money together with the arrival of the gas.

I ironically say, in some moment, that we care very much that the consumers of California and of Mexico will have the gas which is for the Peruvians. That was one of the main problems of Camisea. That's why we lack infrastructure, we lack plans, we lack the requirements in order to develop the capacities, knowing well in advance that we don't have that. It's true what Mr. Quijandria said. It's critical for the country. It touches not only the results coming from Camisea, all the resources of the country, mining and whatever.

And what is the reaction of the population because the state is not there? The reaction of the population is to reclaim to the companies, so the companies face the problem that they are paying their taxes, they are paying their royalties, but this money doesn't arrive to the communities, and the communities reclaim in front of them and they bring social instability for the country. This is a very big problem.

That's why in the latest results the country was divided. I mean the elections. The country was divided into three regions. One is Lima, that voted for one option. The second one are those areas in the coastal area where agriculture has very well performed, who voted for today's elected president. But all the rest of the country voted for a third option that would be terrible for the country, and we still have that in the future. This has not been over. So we need to work quite well in order to avoid having that option in the future, and the only way of doing that is a good development of the country, is a good use of the resources.

What I feel is, you don't only need to have willingness, it's necessary to have some talent in order to make the things happen. What happens is what you try it happen, but if you don't work in that, other thing will happen. That is the situation of the country.

And that's why also I consider that it's very important to have the support of the institution like IDB. Without them, believe me, the situation will be much, much worse. But they cannot implement the recommendations if the government has not the capacities. They cannot go beyond certain limits that are established by the government, so it's the responsibility of the government, who

has to improve its capacity, improve the capacity of the officials in order to do a good job.

That's the point. So what I mean in your question is, the big goal, the most important goal of Camisea was that of energy security. We are going to force the people to invest in changing oil energy matters to gas. What are we going to say to them if in 20 years we have not more, or in 15 years, after the period when the things are going to develop, we cannot sustain that? That would be a worse situation for the country. So a balance there is necessary, and that's why I say that we shall not build Camisea II, betraying Camisea I.

Thank you.

The CHAIRMAN. Well, that's very important testimony, beyond the scope or the capacity of this hearing, which really comes down to the performance of the banks and so forth. Both of you have given such a rich history of Peru in the last generation, through the various administrations and the different objectives, even the most recent political campaign, the division of the country as people take a look at these issues.

And they are looking in countries all over the world that have suddenly come into riches, energy resources, and do not have the capacity, and do have governments and do have money. Sometimes the conflicts here are extraordinary, and they are important for the foreign policy of the United States, in understanding in a more sophisticated way the evolution of affairs.

You have made, I think, an excellent point, that even if there is a small participation by the World Bank or the Inter-American Development Bank, this offers the leverage that can make great differences for the people as we try to work with Peruvians or other citizens to bring about greater local capacity through our exchange programs, through American NGOs that sometimes participate so productively, to try to make sure that there is some decision making group that can make a difference.

And that will have to be the case or there will be broad divisions about these whole projects, either success, failure, or what have you, when the fact is that the revenues are going to come in, the energy security of most countries is going to happen, and the question is whether we take advantage of these new revenues from the production.

Well, let me turn to Chad and Cameroon, and I would ask first of all from the experience of both of you as veterans of the trail, literally, of taking a look at developing governments, including the one we're talking about today. What is the status of democracy in Chad? As a practical matter, if you were to apply, as we have talked about metrics, expectations, what is the governmental capacity of that country, leaving aside whether the decisions it is making are humane or equitable? Dr. Horta, would you have a try at that, sort of filling in the big picture of what we're looking at here?

Dr. HORTA. I would certainly like to try. About the status of democracy, Chad just had presidential elections in early May, and President Deby had himself reelected president. In the previous year, he had the constitution changed to end presidential term lim-

its, and basically many people suspect he wants to become president for life.

From the outset it was known that these elections were going to be so fraudulent that the opposition boycotted the elections, and independent election observers from abroad didn't even bother visiting Chad for the elections because there wasn't going to be much to observe there. So that is unfortunately the state of democracy.

But I would like to mention a very hopeful initiative actually launched by Chadian civil society, a broad cross-section, including the churches, the development organizations, human rights organizations, et cetera. It's a peace and reconciliation initiative that is very promising. It calls upon the government as well as the military, as well as the different rebel groups in the country and civil society, to get together, sit at the same table, and start paving the way in Chad toward genuine democratic reform.

I think this is the most promising thing to be done in a country that continues to be wreaked—wreaked by different rebel movements in different parts of the country and by tremendous discontent, including as I mentioned within the ruling ethnic group, the Zagawa group, which comes basically from the Darfur region, the Chadian side of the Darfur region.

Concerning government capacity, I could not agree more with my fellow panelists from Peru. Our experience too, is that often the policies are good, the standards are good. What's lacking is the capacity to actually implement those on the ground.

The CHAIRMAN. Who will do the job, yes.

Dr. HORTA. Exactly, and that's of course a very hard thing to do, and it may be time-consuming, but that's where I think from our experience that much of the MDB energy should be focused, building the capacity. And it cannot be done, as the Chad-Cameroon and other projects have shown, it cannot be done simultaneously with the physical construction, let's say, of an oil pipeline or a large dam or whatever. It has to be done before, so that these basic structures, the basic capacities, are in place before you actually get started. I think that has been a central recommendation also of the Extractive Industries Review that I have mentioned.

I also wanted to get back to your point where you said that, well, you know, the World Bank just contributes a small percentage of the actual amount that this project costs. This is of course correct, but World Bank financing often does play a catalytical role in the Chad-Cameroon project, and I'm sure in many other projects around the world.

In the Chad-Cameroon case, Exxon Mobile made it very clear that they were not going to go ahead with this project without the World Bank's involvement, not because Exxon Mobile needed a few hundred million dollars from the World Bank, certainly not, but because it provided a level of comfort. They knew that the Government of Chad nor the Government of Cameroon would expropriate—

The CHAIRMAN. That's an important point, that they thought, in terms of the international community, that they needed a framework of governance, of legitimacy that came from this. So, as you point out, we have \$4.1 billion coming from somewhere outside of these banks, which is a lot of money, 85 percent. But, in any event,

your testimony is that Exxon Mobile, just to name one firm, said, "However, we want to have the blessing of the World Bank on this business." That's important, I believe, as to how any sort of leverage comes into this business.

Dr. HORTA. Absolutely. It's exactly that point, and in addition, you know, to having a global governance kind of structure via the World Bank, the other reason why international corporations do like the involvement of the MDBs is of course because it helps attract many other funding sources into the same project, and therefore makes these projects possible in the first place. Many of them wouldn't take place without the small percentages of cofinancing from the World Bank and the other MDBs.

The CHAIRMAN. Mr. Bapna, would you join in this dialog?

Mr. BAPNA. I surely would be more than happy to. I completely concur with the points that were made earlier about the importance of capacity as a prerequisite to ensuring that many of these policies and practices are actually put in place properly. But I also want to take one or two steps back and say, in addition to capacity, there has to be the commitment—the commitment, the political will to actually make these difficult decisions, and this is where some of the commentary about governance strikes a strong chord in these deliberations.

The CHAIRMAN. In that case, now, for instance we have talked about Peru, and they have developed local governments in the last 3 years or so, but in Chad, how would the political will be exercised? You have the president, apparently president for life and so forth, but who else is involved, or is there anybody involved in terms of this political will?

Mr. BAPNA. I mean, I'll defer to Korinna to speak a little bit more specifically about Chad, but I think the challenge there is that the Bank recognized that there was a real risk in terms of political commitment. And so they tried to put in place a number of mechanisms to address, to try to mitigate the risk of that, in part by having these escrow accounts, kind of an offshore escrow account, in part by having this college, this civil society kind of multi-stakeholder oversight mechanism about how revenues would be used. They also informally conveyed conditions about future lending to the country.

But I think what the last few months have demonstrated is that despite that, once a decision is taken to approve the project, much of the leverage that the Bank may have had withers away. And then you saw what actually took place in terms of the decisions that the president took and the corner that the Bank was placed in.

And I think that the challenge remains. It's a real challenge, and I think we're still struggling to try to understand how best to assess minimum kind of governance benchmarks or criteria that would justify major investments, major risky investments, particularly investments that—and both these projects are of that case—that are revenue generation projects. The rationale for these projects is not necessarily to serve a broad set of domestic users. It's about generating resources and using those resources wisely, and for those types of projects it elevates the importance that has to be attached to these governance issues.

I'd like to perhaps also say that even if one were to take a step back, I'd like to underscore the importance about the process of how these projects are selected, and what I called earlier this concept of a comprehensive or participatory options assessment.

In part, I feel that oftentimes the Bank gets caught in a dilemma by having to make very difficult assessments on these particular projects when it is unclear whether or not a truly transparent participatory options assessment has been done beforehand, prior to a project being selected, to find out what is the technically most viable, feasible way to deliver on a particular good. And oftentimes it may not necessarily be the project that is ultimately put forward by the Bank. And so I think if the Bank were to more actively encourage and engage and ensure that a proper options assessment was done upstream, it would diminish the risk that you would end up with having to face a difficult tradeoff on whether or not to support a controversial project.

The CHAIRMAN. I am just curious. You mentioned the college, and this is sort of the hope of an independent group of people in society who are offering advice. How do they fit in with the president of Chad? What view does he take of these people? Are their civil liberties threatened? Are they free to editorialize and make speeches? How do things work in Chad, so that there is some check and balance there? Do you have a thought about that, Dr. Horta?

Dr. HORTA. Power in Chad is in the hands of the president, and the oil project has further consolidated his grip on power because he has means available to him now that he didn't have before. It's like all the taxes and the customs revenues that he is receiving through the oil project. He controls—he largely controls them.

Now, the College de Controle, this oversight committee of course is a very good idea, and the Treasury Department actually deserves thanks to have—

The CHAIRMAN. That's the U.S. Treasury Department, right.

Dr. HORTA [continuing]. The U.S. Treasury Department deserves to be thanked for the technical assistance it has provided to this college. Its composition is both people from the governmental side, actually the majority, and civil society. And under very difficult circumstances—they have no autonomous financing, they are very underfinanced, they are understaffed, they have a lot of difficulties—even under those circumstances, they have tried to do and have done a very, very good job.

Last summer they issued a report that the Financial Times actually reported on extensively, showing that much of the money that they had a chance to review was lost to corruption, that there was no comparative bidding, there was overpricing, there were all kinds of problems. Actually in this same Financial Times article, the Bank expressed already then—this is, you know, just a year ago—a big concern about what was actually happening to the revenues in Chad.

But the main problem of this college is that it can issue a report, but then it cannot do anything further. There is no functioning judicial system in the country. There would be no court, you know, where the college could turn to and say, "Here, we have had all these corruption issues. Can you further look into this and investigate, indict, convict, whatever." No, it just stops there. The college

lives by the grace of the international donor community, the World Bank, the U.S. Treasury Department, and it's doing valuable work but it's of no real consequence.

So one of the things that we would hope will happen as part of the renegotiation that the World Bank is currently having with Chad on the revenue management would be a strengthening of the college, and providing it with all the resources that it needs to function properly.

The CHAIRMAN. I think we would all encourage that that be the result of these renegotiations.

Now, just to be devil's advocate for a moment, skeptics coming into this hearing at this point would say, "Now, get real, folks." Here you have a situation in Africa, in which I saw this in a country that was not too far from Chad, in Libya, for example.

I spent 2 nights in the Corinthia Hotel there in Tripoli, and there were a large number of people from India and China, so I was inquiring about why everybody is here in such numbers. Among those who wanted to converse about the subject, they in essence said, "We're here to pin down about the last square mile of the country in terms of preemptive rights for energy resources, and for that matter we are about this task in many states in Africa. Libya is not the only one."

In short, in a competitive world in which countries are seeking their energy security, having large populations like India and China—and I don't fault them for looking out after their citizens, how they're going to progress—they are thinking ahead. Where are the resources, anywhere on this earth, and what are the values, and how do you bid them up in competition?

Now there are some United States interests involved there, but at that particular time we had just a very small number of consulate people there. That has been changed as a policy of our Government, subsequently. We're going to establish again an embassy and establish the possibilities of dealing with Libya and the area.

But at the same time the Chad situation illustrates, at an earlier time but maybe evolving if Chad develops more resources of this sort, our testimony here in the committee records, which is derived from your expert witnesses, that about 118 million barrels of oil were produced there in Chad. You know, that's \$10 billion worth of revenue, more or less, at world prices, coming into a relatively small country, and the meter is still running as we're talking today. More barrels are being produced.

And by and large, the world rejoices. Thank goodness that is the case, that the supply side, which is so narrow over world demand, is somehow being helped, even if by somebody who seems to be taking on authoritarian characteristics. And so these compromises keep occurring.

I emphasize this because I admire the leadership of the World Bank in trying to tackle this. You know, our purpose at this hearing is not to pounce upon the development banks. They are the heroes of the situation, to the extent that they have any leverage whatsoever in what we have already described as two situations in which the tremendous bulk of the money came from elsewhere. They had nothing to do with it.

But because of these other loans, and the interest of our Treasury Department which you have cited and which I would again, and our State Department and others, there begins to be some hope for a dialog here. It could be ignored by the President of Chad, but there is this college group or others who are at least piping up and giving an opinion with regard to this.

But the way the world works, things are not necessarily working in favor of those who are trying to build democratic institutions. And that's a whole subject for a different hearing, how energy intersects with democracy, but it intersects in a big way here, in Chad. And so the question is, how do we support the World Bank, the reforms that are occurring internally, which I have cited today, and continue that movement which I think is important, and which perhaps we did not see prior to a short time ago. We certainly applaud this movement.

I would just ask either one of you, Dr. Horta, Mr. Bapna, do you have some optimism about that trend, with Chad as a citation, but likewise other situations in which you are both involved? Do you see some hope for this civil dialog to progress to the benefit of infrastructure that helps support people in the countries that are being served? Yes, sir.

Mr. BAPNA. Just a few points in response to that very important question you posed. There is no doubt that the competition for energy resources around the world today is escalating incredibly, and that even if the multilateral development banks were not to support some of these projects, clearly there is—

The CHAIRMAN. They are going to do it anyway.

Mr. BAPNA. Many of them, not all, but many of them will go ahead in any case.

The CHAIRMAN. Yes.

Mr. BAPNA. But I think, to this point, we need to avoid what oftentimes is a common fallacy. That is, just because the involvement of a development bank improves a project doesn't mean that the bank must be involved with any project that it can improve. To put it perhaps in another way, just because there is a poorly designed, destructive project that the bank can do better, doesn't mean that the bank should be involved in that project.

It's also important to note that the banks collectively committed in 2005, \$20 billion in infrastructure, and that's a drop in the bucket. The amount of overall—the need for infrastructure lending is considerably orders of a magnitude higher than that.

So the question that I believe the development banks have to ask is how to be as selective in their investments. As the infrastructure needs to escalate, they have an opportunity to really model the way to support innovative, truly pro-poor infrastructure projects that emerge in a transparent participatory process. They should be, in light of this kind of broad landscape, particularly selective in what they actually support. They should uphold the highest international standards on transparency, on corruption, on participation, on environmental and social impacts. And on that, it's useful to note that the United States has oftentimes been a lone voice in advocating for stronger standards on the board, and there is a need to develop broader political support from other members of the board of directors for higher standards on these issues.



I think in terms of where, let's say, the World Bank is in terms of its ability to take on this challenge as the need for infrastructure escalates, it's a bit of a mixed bag right now. There is the recent report that you referred to earlier in your opening remarks or in your questions. That was a particularly candid and honest, reflective report that I think the Bank should be applauded for in terms of preparing. Whether or not they will operationalize some of the main lessons that were learned remains to be seen, but I think that at least they have a better sense of what some of the mistakes were in the past.

But I would like to highlight a recent development that took place that's somewhat troubling, which is, just about 2 weeks ago or so the World Bank dismantled its environmental and social sustainable development vice presidency and integrated in with the infrastructure department. And despite some of the rhetoric that indeed this will allow better integration, better mainstreaming, many of us on the outside are particularly concerned that this shift signifies subordinating common environmental and social issues to the need to lend, the need for infrastructure.

So to your question about will the Bank learn from its mistakes in the past, I think the jury is still out. I remain committed to trying to support them in doing so, but I think we could use further attention on this matter.

The CHAIRMAN. Let me just ask if any panel member has further comment at this point. Yes, sir.

Mr. QUIJANDRIA. Thank you, Mr. Chairman. I was invited to talk about Camisea, but I know some facts about Chad-Cameroon, being a member of the board of the World Bank.

The CHAIRMAN. Yes.

Mr. QUIJANDRIA. My impression is that we have had very important pressure not to finance infrastructure projects, and if you see the figures of the lending process of the World Bank during the last 10 years, you will notice that infrastructure went down \$4 or \$5 billion before Mr. Wolfensohn decided to take gain and not work the curve.

The extreme case that I have been familiar with is the case of a hydro project, Nam Theun 2 in Laos, which took 12 years to come to the board, and we spent more than \$15 million developing the project, which is more than the total amount of aid that the World Bank was giving to Laos.

So this is the kind of lessons that we learned that probably gives us a very clear idea that we should not only be engaged, but we have to be very clear that the additionality of the Bank is very clearly to be proven. It's clear that the Bank has a tremendous 60 years of experience on infrastructure. Probably no other institution, financial institution, in the world has had the experience that the Bank has with roads, hydros, and whatever. So we think that we should remain engaged.

And, second, I want to tie this to a comment on energy security, and this is specific for our region. My difference of opinion with Mr. Herrera probably is that he is pessimistic about the results that we are going to find and I am optimistic. I think that we should think in terms of developing the infrastructure because we are going to find more gas. There's no question about it.

When Bolivia signed the contract with Brazil to sell it 10 billion TCF, the reserves at that time were 6, and now Bolivia has 35 or 40 billion reserves. So my hunch, Mr. Chairman, if you allow me, is that we are going to find more gas, and probably will be very shortly dealing with the problems related with it.

As to the kind of project that this institution finances, I couldn't be more in agreement that we should avoid the kind of projects which are probably not the consistent. This fortunately is not the case of Camisea. We have debated Camisea for 20 years, as I told you before, so this was very ripe and a very good project to be financed, and I think the involvement for IDB has been not only beneficial for the Peruvian Government and for the companies but also for IDB. They have learned a lot on this project, although there have been quite a lot of criticisms and probably a lot of discussion in the newspapers on it, but it has been beneficial, all in all.

The CHAIRMAN. Concluding on an optimistic note there about additional reserves as well as improvement of capacity and learning.

Mr. Herrera, do you have a final comment for us today?

Mr. HERRERA. Yes, Mr. Chairman. Well, being pessimistic or optimistic, it's relative. I prefer to be realistic, and the source of realism is the history. In Peru in the 1970s, for first time we are led to be, after so many years, net importers of oil. And our government and military, our leftist military at that time, proceeded the visit of a very well-reputed German geologist, and he says more or less that Peruvian jungle was like the Mariciabo Lake. It was floating in oil.

They have a grounded state oil company, Petroperu, and of course Petroperu has not enough equity or capital in order to drill so much. They make three drills in three different places, and they found oil. So on the theoretical basis for being floating on oil, and after three successful drillings we shall suspect that we have plenty of oil. We need to bring the oil to the coast, so we built a pipeline, an oil pipeline. Even with the technology of that time—it doesn't spill like today's with highest technology.

And one problem was, what will be the diameter of this pipeline? Because it will be related to the capacity. So it was dimensioned for the oil already found and for what we will find in the future. It happened 30 years ago. We never found more oil that could be economically transported. So I just think this story says it happened to us once. Are we going to make the same mistake for the second time?

I am also optimistic in the sense that we are going to find gas, so I say as the original contracts work, let's dedicate to exportation the gas that we are going to find, and let's dedicate to Peruvian security the gas that we have already found, with investment that means expending \$500 million in the jungle in that time. But let's not dedicate the gas that we already have to exportation and wait to find new gas for certifying the growth of the country. This is practically the main difference.

And regarding what happened to Camisea I, it's in the written testimony but I probably forgot to say that an investigation has been asked about how the project has performed. What is clear is that there have been five spills, and we can realistically suspect

that everything is not well-built. There are failures in some place, either in the design, either in the construction of the pipeline, or more probably in the soil.

But we need to clarify that before, because only source of gas, significant, relevant gas in Peru is Camisea, and we are linking the economic area along the coastline to the Camisea fields through one pipeline. So the reliability of the supply depends on this one pipeline, and we cannot continue growing with the supply to the commercial areas, to the central economic areas, without being sure that at least this pipeline shall perform well.

According to the contracts, it has to meet certain levels of availability per year. In the 3 years that it is working, not a full year in 2004, not a full year in 2006, it has not committed the compromises. It has performed far below of what it has been compromised. Then we need to be sure in the future that it will work properly. And I will recommend to tie Camisea second stage to being sure that Camisea first stage pipeline will work properly.

Thank you, Mr. Chairman.

The CHAIRMAN. Good counsel.

Dr. Horta, do you have a thought at this point?

Dr. HORTA. Yes. Just to get back to your question about is there any grounds for optimism, are there some positive trends, I remember putting exactly that same question to my African colleagues in Chad and Cameroon. And the answer that I got was, "Of course." And the positive trends are the strengthening of civil society organizations in those countries, and sometimes a large project also helps to catalyze a civil society movement.

What we need to take care with, of course, since it is a very fragile civil society still, is that large-scale lending does not contribute to undermining democracy. Moving large amounts of money is always also a political thing, and we can inadvertently, you know, just further entrench authoritarian regimes if you don't pay careful attention to the governance criteria that should be in place before carrying out this type of investment.

The CHAIRMAN. Well, that's certainly good advice. I suppose the dilemma is, however, given the extraordinary amount of money involved in energy projects in particular, we are fated one way or another in this role to have a lot of cash. And the question then will be how the civil society progresses even in the face of a large amount of money, often in the hands of the governments, some better than others.

Mr. Bapna, do you have a concluding comment for us?

Mr. BAPNA. Just a quick comment. We talked a lot today about the correlation between large, high-risk infrastructure and economic growth. Mr. Lowery, Secretary Lowery, mentioned that in the earlier panel as well.

The CHAIRMAN. Yes.

Mr. BAPNA. And I want to make a point that not all growth is created equal. Some types of growth are much more pro-poor than others. And the question before the multilateral development banks, which have an explicit poverty mandate, is now to most effectively catalyze pro-poor growth and actually reduce poverty on the ground.

This reminds me a bit about that old joke about economists, that we know that the ability of infrastructure to reduce poverty works in theory, but we are not yet sure that large infrastructure reduces poverty in practice.

And in terms of the optimism, I do think there are reasons to be optimistic, and I think that if we can encourage the development banks to shift to more forcefully investing in smart infrastructure that has more direct and immediate benefits for the poor—these are oftentimes smaller, they are less costly, they are decentralized, but they are approaches that have been proven to work—and I think if we could do that, we would go a long way toward helping infrastructure reduce poverty.

Thank you.

The CHAIRMAN. Well, we thank each one of you for your testimony, and for your good counsel to the banks and to all of us, and to citizens all over the world who face the problems we're talking about today. We had two instances of two countries bearing the brunt of our scrutiny, but we also expressed our hopes for development in both cases and a new capacity to govern.

Thank you very much. The hearing is adjourned.

[Whereupon, at 11:45 a.m., the hearing was adjourned.]

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ADDITIONAL MATERIAL SUBMITTED FOR THE RECORD

LETTER FROM THE AMBASSADOR OF PERU TO THE UNITED STATES, SUBMITTED BY  
SENATOR RICHARD G. LUGAR

EMBASSY OF PERU,  
*Washington, DC, July 7, 2006.*

Hon. Richard Lugar,  
*U.S. Senate, Hart Senate Office Building,  
Washington, DC.*

DEAR SENATOR LUGAR: This letter is in regard to the hearing scheduled for Wednesday, July 12, 2006, at the United States Foreign Relations Committee, under your chairmanship, on the development impact of energy projects financed by multilateral development banks. One of the projects being considered in this hearing is the Camisea natural gas project, which began commercial operations in Peru in August 2004.

I am confident that this brief letter will allow your committee to appreciate the enormous significance of the Camisea project for Peru, including the Liquefied Natural Gas (LNG) component, whose overall development without doubt is consistent with your vision on the need to stimulate partnerships in the western hemisphere, particularly among energy producers and consumers.

As indicated, the Camisea project began operations in August 2004 after a 3-year construction period. Undoubtedly, this has been the most important project ever developed in the history of Peru. Because of its economic significance, the project will not only help improving the standards of living for most Peruvians, but it will also strengthen Peru's democracy.

Camisea has had a significant impact in the energy sector in Peru, since the gas is mainly used for domestic consumption at this first stage.<sup>1</sup> The operating costs of the Peruvian main electricity grid have been reduced in approximately 30 percent. In addition, electricity user's savings—measured as the difference between the value of the electricity produced at its marginal cost with and without Camisea—account for a net present value of US \$3,371 million or 4.3 percent of our GDP. Moreover, Peru is now using a cleaner source of energy. A significant portion of the revenues,

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<sup>1</sup>Although the project was designed by the government to mainly help the development of the domestic market in Lima, there is a significant generation of export revenue since the liquids, which are extracted together for the gas, are totally exported.

those generated by the royalties paid by the operating companies, are being transferred to the least developed and poorest areas of the country.

I would also like to emphasize that the Camisea project is crucial not only to the Peruvian economy but also to the energy security of the Latin America region. The LNG project currently being considered by a consortium of private investors, will allow the export of gas to Mexico and possibly to Chile, and will help reduce the oil dependence of many countries including the United States.

In the recent Presidential elections, Peru has reaffirmed its strong commitment with both a more participative and inclusive democracy and a market economy. Peru needs the support of the United States and its allies to show to the international community that it is possible to have an open, market-oriented economy and reduce poverty in the context of democratic governance.

Finally, I would like to express to you that the Government of Peru, with the support and assistance of the Inter-American Development Bank (IADB), has taken significant steps to improve the environmental and social aspects of the project. We are committed to continue monitoring the project to make Camisea a paradigm of clean, socially responsible infrastructure projects in the region.

For your information, we are attaching to this letter specific information about the benefits of this project for Peru and the actions taken by the Government of Peru and the IADB to improve the sustainability of the project.

Sincerely yours,

EDUARDO FERRERO,  
*Ambassador of Peru.*

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#### BENEFITS OF THE CAMISEA PROJECT

From an economic point of view:

- The Camisea project is crucial for the development of Peru. Net present value of the additional production value due to the project, is calculated at US \$5.5 billion (equivalent to 6 percent of Peruvian GDP).
- Government income due to taxes will increase US \$1.4 billion in net present value (representing 19.8 percent of the tax income of the central government).
- Peruvian law requires that an important part of the income generated by any project will remain in the area where the natural resource was discovered. Therefore, the region of Cusco, one of the poorest areas of Peru, will receive annually approximately US \$156 million, which is equivalent to US \$911 million in net present value (more than 100 percent of the 2005 budget for the region of Cusco).
- Thanks to this project, more than 700 Km of roads and more than 20 bridges have been improved in the poorest areas of Peru.
- The energy deficit of Peru will be reduced by more than US \$500 million per year.
- More than 100 industries will replace liquid fuels by liquid gas, improving the competitiveness of these industries and using a cleaner source of energy.
- More importantly, 50 percent of the royalties arising from the exploitation of Camisea return directly to the local governments where the gas line passes by, like Cuzco, Ayacucho, etc. This rate of return to the local communities is the highest in Latin America.

From a social point of view:

- The marginal cost of the energy in Peru will be reduced, on average, 30 percent. This will bring major benefits to the poorest people.
- The project has created, annually, more than 7,200 permanent positions and more than 6,000 indirect jobs.
- A Special Development Fund has been created by Peruvian Congress to promote the execution of developmental sustainable projects in the zone of influence of the project.
- The Government of Peru has passed laws to protect areas where indigenous communities, living in isolation, are located.
- Moreover, the Government of Peru has set basic health centers in the area of influence of the project to take care of the needs of the indigenous people, which had not previous access to this service due to its remote location.

From the environmental point of view:

- An Inter-Agency Commission has been created to monitor the sustainable development of the Paracas Reserve, the only marine reserve in Peru.

- A plan to revegetate was agreed to between the Government of Peru and the sponsors of the project to preserve the species and ecological balance in the area where the pipelines were laid.
- The Special Development Fund will consider the preservation of the environment as one criterion to evaluate the sustainability of the project.
- The ability of the government to monitor the project in remote areas has been strengthened significantly. The main purposes of the measures are to address very old problems, prior to the development of the Camisea project, like the illegal and indiscriminate tree logging in the jungle; and to preserve the intangibility of the area where indigenous communities live.

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EXAMPLES OF SMART INFRASTRUCTURE PROJECTS FINANCED BY MDBS—SUBMITTED BY  
MANISH BAPNA

**India: Uttar Pradesh Rural Water Supply and Sanitation Projects.**—The project empowers village communities to make design choice and procure materials, services, and civil works. They are supported by NGOs that assist with community mobilization and private firms that provide technical design, inspection, and monitoring services. Investments in water supply and sanitation are complemented by programs promoting health awareness, women's development, and nonformal education. The project has achieved full cost recovery for operation and maintenance, and partial cost recovery for capital costs—major improvements over past practice in the Indian water sector. Recent evaluations of sustainability have shown that 92 percent of the water supply schemes and 100 percent of the latrines financed by the project are fully functional and in use by the beneficiaries.

**Brazil: Rural Poverty Reduction Program.**—Community-driven approaches to development offer enormous potential for reducing poverty and improving lives, as shown by the Rural Poverty Reduction Program in northeast Brazil. The program has done a remarkable job of delivering basic infrastructure and services, supporting 55,000 small-scale investments—including 10,000 investments in water supply and 8,000 in electrification—in a region that contains Latin America's largest concentration of poor rural people. Just as important have been the program's effects on empowering communities, building social capital, improving governance, and reducing corruption. The program works directly with poor rural communities while leveraging the involvement of an increasingly broad range of public and private partners—including municipal governments, nongovernmental organizations (NGOs), public and private service providers, and churches, to expand coverage, exploit special skills, and build constituencies. The core institutional mechanism is the community associations; they define, execute, operate, and maintain the investments from which they benefit, acting through decentralized, participatory municipal councils in which 80 percent of voting power for approval of proposed investments rests with community representatives.

**Mexico: Large-Scale Renewable Energy Development Project.**—The project aims to assist Mexico in developing initial experience in commercially-based grid-connected renewable energy applications by supporting construction of an approximately 101 MW IPP wind farm, while building institutional capacity to value, acquire, and manage such resources on a replicable basis. The global objective is to reduce greenhouse gas emissions by addressing and reducing the barriers to development of grid-connected renewable energy technologies and markets in Mexico.

**Indonesia: Kampung Improvement Project III.**—Housing conditions and solutions vary widely from place to place in a large metropolitan area such as Jakarta. This UNDP/World Bank program attempted the difficult task of tailoring upgrading from site to site across a large city. To do so, they used community-based organizations (CBOs) as project initiators to encourage an active, innovative, and self-sustained community in which upgrading could take place. This program is considered to be one of the best urban poverty relief programs in the world for several reasons—one being the low level of investment needed per person (US \$118 in Jakarta to US \$23 in smaller cities), another being its sustainability. Since its inception in 1969, the concept has spread to 800 cities in Indonesia to benefit almost 30 million people and is among the best urban poverty relief programs in the world. The KIP program has had three phases. The first two concentrated on physical improvements and the third phase added a social/economic dimension to the equation by devoting 12 percent of the funding to economic development.

**India: Karnataka Community-Based Tank Management Project.**—The project development objective is to improve rural livelihoods and reduce poverty by developing and strengthening community-based approaches to improving and managing selected tank systems. The project consists of three components: (1) establishing an

enabling environment for the sustainable, decentralized management of tank systems; (2) strengthening community-based institutions to assume responsibility for tank system development and management; and (3) undertaking tank system improvements. The third component is further subdivided into: (a) improving the operational performance of selected tank systems through a menu of physical interventions identified and executed by local users and (b) facilitating technical training and on-farm demonstrations in water management, agriculture, and horticulture development, fisheries, forestry, and fodder production to help ensure that improved water storage and efficiency is translated into increased household incomes.

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ANNEX 1.—PROFILES OF LARGE INFRASTRUCTURE PROJECTS SUPPORTED BY MDBS—  
SUBMITTED BY MANISH BAPNA

CHAD-CAMEROON OIL PIPELINE (CHAD, CAMEROON/WORLD BANK, IFC)

The \$4.2 billion Chad-Cameroon Oil Development and Pipeline project is the largest private sector investment in sub-Saharan Africa and one of the most controversial in the history of the World Bank. The project involved the construction of a 1070 km pipeline from oil fields in southern Chad to the Atlantic Coast of Cameroon. Before the World Bank Group approved financing for the investment in 2000, local and international civil society organizations called for a moratorium on the project until minimum conditions of good governance, respect for human rights and capacity to manage the petroleum sector were in place. Instead, the bank group maintained that government capacity could be built in tandem with pipeline construction and that a law on the management of oil revenues would provide an adequate safeguard to ensure that petrodollars would be used for poverty reduction. Six years later, the project has not yet delivered its promised benefits; there is little evidence of any improvement in the lives of the poor in Chad and the country is in crisis. Pipeline construction was completed a year ahead of schedule and oil began to flow in 2003, while government capacity building projects in Chad and Cameroon lagged far behind. Then, facing mounting political instability in Chad, the government decided in January 2006 to amend the “model” revenue management law, stripping it of its strongest components in order to allow the government to use more of the oil revenues for military spending rather than poverty reduction, and eliminating a savings account for future generations. Meanwhile, in Cameroon, there remain significant outstanding concerns about environmental and social harm along the pipeline route, including failure to mitigate the spread of HIV/AIDS, loss of water sources, inadequate compensation for crops, and threats to the indigenous pygmy population. The experience of the Chad-Cameroon pipeline demonstrates how contingent development impacts are upon the will and capacity of host governments to protect the rights of their populations and harness revenues for poverty reduction. Recent events reveal the pitfall of failing to follow proper investment sequencing—governance capacity first, investment second—and illustrate the risks for the poor inherent in a large-scale project built in absence of a solid foundation of public accountability and the rule of law.

LESOTHO HIGHLANDS WATER PROJECT (LESOTHO, SOUTH AFRICA/WORLD BANK)

The Lesotho Highlands Water Project (LHWP) is a huge interbasin water-transfer scheme comprising five proposed dams, 200 kilometers of tunnels blasted through the Maluti Mountains, and a 72-megawatt hydropower plant that will supply power to Lesotho. One of the world's largest infrastructure projects under construction today, the LHWP has been plagued by corruption scandals in recent years. The project's primary purpose is to transfer water from the tiny nation of Lesotho to Gauteng Province, the industrial heartland of South Africa. Water conservation (demand-side management) alternatives that would have allowed the postponement of the project's second dam were foregone, despite growing public concerns about the link between the costly LHWP and rising water rates for consumers in South Africa. Social and environmental impacts in the project area have been devastating to the local population. Over 20,000 people have moved into the area, greatly increasing the spread of communicable diseases such as HIV/AIDS. In addition, over 200,000 people were physically or economically displaced for the construction of the Khatse dam, the first stage of the large project. Replacement housing took years to complete and livelihood restoration efforts have been inadequate. Two of the five dams are already complete. Local communities are concerned that if remaining dams are constructed, thousands of acres of Lesotho's scarce arable land will be flooded. The land and livelihood loss, threats to food security and public health costs, as well as the

impacts of water price increases on consumers in South Africa, underscore the failures of this large-scale scheme to address the needs of the poor.

CAMISEA GAS PIPELINE (PERU I IDB)

The project involves the extraction, transportation, and distribution of natural gas for domestic consumption and export. Operations have only recently begun, so it is too soon to tell if the project is achieving its economic development objectives. However, its sustainability is already in question, on account of problems that start with the nontransparent project siting process and the lack of consideration of alternatives/opportunity costs. Camisea is based in a remote, ecologically fragile tropical area, the Lower Urubamba Valley of the Peruvian Amazon. High risks related to environmental degradation of pristine, high-biodiversity areas, and social impacts related to involuntary resettlement, the destruction of food and water supplies of local communities, and the exposure of voluntarily isolated indigenous peoples to illnesses for which they have no immunological defenses. Poor regulatory capacity has been seen in the Peruvian Government's and operating consortium's inability to deal with the consequences of multiple ruptures in the liquid natural gas pipeline, and earlier this year reports surfaced in the Peruvian press of a possible conflicts of interest involving a top government official, who was a strong Camisea supporter despite having several compromising corporate entanglements.

MARLIN MINE PROJECT (GUATEMALA I IFC)

The project involves the installation and operation of an open pit gold mine in the predominantly indigenous department of San Marcos, in the western highlands of Guatemala. Project selection took place in a highly nontransparent and nonparticipatory way, with apparently little consideration of alternatives/opportunity costs by the mine's owner, Canadian company Glamis Gold. High environmental risks relate to degradation of a dry, fragile ecosystem, pollution, and overuse of freshwater and other scarce resources. Social impacts include inadequate consultations and blatant disregard by Glamis and the Guatemalan Government of the culturally-influenced wishes of local people. The operation of the mine in the face of popular opposition has created the potential for violence and human rights abuses, but none of the principals involved—especially Glamis or the government—have shown much interest in or ability to defuse the situation by negotiating with the affected communities in good faith. Weak regulatory and planning capacity is evident in the government's consideration of a company proposal for mine expansion, even though none of the required impact assessments or community consultations have apparently taken place.

YACYRETA HYDROELECTRIC PROJECT (ARGENTINA, PARAGUAY I WORLD BANK, IDB)

The binational Yacyreta hydroelectric dam has been sponsored by both the World Bank and the IDB through numerous projects implemented over the last 27 years. Its main objective has been to generate least-cost electricity to cover up to 40 percent of the energy demand in Argentina's urban centers, a goal it still has not been able to satisfy because the dam is operating below capacity. The Yacyreta reservoir was never impounded to the design level because of persisting delays relating to the mitigation of the original construction projects' numerous social and environmental impacts, including loss of biodiversity in the project area, degraded water quality, and loss of livelihoods resulting from the involuntary displacement and resettlement of over 50,000 people in urban areas. Weak capacity on the part of EBY, the binational entity undertaking the project, has been a chronic problem, and deficiencies in the overall governance and oversight frameworks for the original projects have led to implementation delays, cost overruns, allegations of corruption, and contractual disputes.

BAKU-TBILISI-CEYHAN PIPELINE (AZERBAIJAN, GEORGIA, TURKEY I EBRD, IFC)

The Baku-Tbilisi-Ceyhan (BTC) Oil Pipeline, which has been built with the aid of financing from the IFC and the EBRD, is planned to transport up to one million barrels of oil per day from the Caspian Sea through Azerbaijan, Georgia and Turkey. Local groups and international NGOs have objected to the project on several grounds:

- The banks approved the project without clear guidelines on how adversely affected local landowners would be compensated or resettled;
- The pipeline runs through an earthquake-prone region, putting it at risk to damage and severe environmental pollution;



- The pipeline crosses the watershed of the Borjomi national park, an area of Georgia famous for its mineral water springs and natural beauty, thus threatening the livelihoods of people in the region;
- Arrangements for using the revenues from the pipeline are not transparent, and corruption is a serious concern in parts of the region.

K2R4 SAFETY AND MODERNIZATION PROGRAMME (UKRAINE I EBRD)

The Ukrainian nuclear reactors Khmelnytsky 2 and Rivne 4, often referred to as K21R4, were completed and modernized with the help of financing from the EBRD and Euratom in 2004. EBRD participated in financing the projects despite concerns about: safety (the reactors are based on risky Soviet-era designs); high costs (an independent panel of experts contracted by EBRD to review the economics of the project concluded that completing the reactors was not the most productive use of the EBRD's money); and complaints that the decision-making process was nontransparent and undemocratic (there was little evidence of popular support, but much evidence of lobbying by companies that supplied nuclear technology to the projects).

SAMUT PRAKARN WASTEWATER MANAGEMENT PROJECT (THAILAND I ADB)

The Samut Prakarn Wastewater Management Project Samut Prakarn was conceived by the Government of Thailand in the early 1990s to address the severe water pollution problems in Samut Prakarn Province. The project was originally designed to comprise two treatment plants in an industrial zone. The plant design and location were subsequently changed by the private contractor to include a single plant in the fishing village of Klong Dan, a location 20km east of the industrial zone. ADB Management treated this departure from approved plans as a routine matter and failed to conduct additional studies or seek approval from its board. Under the changed site and design, the project (now on hold due to an ongoing corruption investigation by the Thai Government) poses adverse environmental and social impacts that will affect 60,000 villagers living near the project location, most of whom only found out about the project when construction started. Local communities allege that corruption was involved in the purchase of land for the project as it was bought at an artificially high price and all 17 plots comprising the project area were sold by a single company at exactly the maximum price allowed under the contract; this suggests collusion between buyer and seller. Affected communities filed an inspection case at the ADB whose findings confirmed that the ADB had violated its own policies during project preparation and implementation. The Thai Government investigations have corroborated the corruption charges leveled by the community and have uncovered additional evidence. ADB's involvement in the project did not prevent corruption from arising; instead of assessing and minimizing corruption risks in a project in a country which at the time was ranked among the most corrupt countries in the world, ADB abdicated its oversight functions to the "turn-key" contractor and its Special Review Mission of 2000 dismissed evidence of corruption. The ADB Office of Auditor General never conducted an internal investigation and argued that as the land transactions were being investigated by the Thai Government, it limited its review to the wholly separate issue of an alleged conflict of interest involving a key ADB staff member on the project. The ADB to date has not responded to the allegations of corruption raised by the Klong Dan community in a satisfactory and straight forward manner.

MUMBAI URBAN TRANSPORT PROJECT (INDIA IWB)

The US \$945 million MUTP, which includes a US \$542 loan from the Bank, began in 2002 and was designed as a first and urgent step towards improving physical infrastructure in rail and road transportation. With more than 100,000 people to be resettled to make way for the infrastructure improvements, MUTP is among the largest urban resettlement projects supported by the Bank in the world. Claiming that the WB had violated its own policies and procedures, three organizations representing affectees submitted a claim to the WB Inspection Panel in 2004. The panel's findings, approved by the board, found that even though affectees were originally living in squalid conditions, the Bank violated its resettlement policy by not ensuring their income/livelihoods and physical environment were improved in the resettlement sites; sites lacked access to water and sewerage and did not cater to the specific business/trade needs of the affectees. The Bank management suspended loan disbursement in March 2006 to bear pressure on the executing agency to comply with Bank policies; the response from the executing agency was one of defiance and the Bank resumed lending in July 2006 even though the head of the executing agency claims it has not changed its resettlement practice and that it has in fact

forced the WB to change its policies. Progress reports from both Bank management and the inspection panel are due September 2006.

NAM THEUN 2 HYDROELECTRIC PROJECT (LAO PDR I WB, ADB)

In April 2005, the World Bank and Asian Development Bank, respectively, approved up to \$270 million and \$120 million in loans and risk guarantees for the 1,070 megawatt Nam Theun 2 Hydropower Project in Laos, following nearly a decade of discussion. This came despite a number of concerns raised by various civil society groups relating to the significant environmental and social costs, inadequate consultations with project affected persons on the design and mitigation measures of the project, lack of revenue management oversight, and presence of other least-cost options. Nam Theun 2 is the first major dam to be supported by the World Bank since it announced its intention to ramp up lending for large dams and other "high-risk" infrastructure projects. In a country where civil liberties and free speech are severely restricted, independent oversight of the project's progress cannot be assured. Construction has already begun and while the NT2 revenues will account for only 3 to 5 percent of total revenues for Laos from 2010 to 2020, the project is expected to displace 6,200 indigenous people and impact more than 100,000 villagers who depend on the Xe Bang Fai River for fish, agriculture, and other aspects of their livelihood. WB has already reported on the delays in the implementation of environmental and social programs and independent reports from the site suggest the resettled villagers are having difficulty adjusting to their new "settled" lifestyles and cropping patterns. Concerns about the capacity of the private consortium and the Lao government to abide by WB and ADB policies, and the ability of WB and ADB to implement their policies remain.

SOUTHERN TRANSPORT DEVELOPMENT PROJECT (SRI LANKA I ADB)

The Southern Transport Development Project (STDP), approved in November 1999, involves the construction of a 128-km expressway linking Colombo with Matara in the south. The Asian Development Bank (ADB) has provided a loan of \$90 million from the concessional Asian Development Fund to finance the southern 61-km section from Kurundugahetekma to Matara, construction of which is currently ongoing. Japan Bank for International Cooperation (JBIC) is financing the northern 67-km section, and the government is financing the balance. Local groups are most concerned about the significant alteration of the original road alignment, as identified in the ADB-financed feasibility study, without the requisite due diligence and without the approval of the ADB Board of Directors. This alteration has resulted in a host of problems including increased number of people to be resettled, poor facilities in the resettlement "villages, lack of attention to economic and social rehabilitation of oustees, lack of participation, information and transparency, environmental degradation, and disturbance to social networks and structures." The ADB's independent compliance review panel accepted a case from affectees in 2004 and its investigations have confirmed the ADB failed to implement its policies or provide adequate supervision, which led to the above impacts. The CRP's findings have been accepted by both ADB board and management but remedial measures by management are behind schedule.

RESPONSES OF HON. CLAY LOWERY TO QUESTIONS SUBMITTED BY SENATOR RICHARD G. LUGAR FOR THE RECORD

CAMISEA

*Question.* What concerns did the United States raise at the board meetings on Camisea? Could you please provide a copy of the United States Executive Director's board statement on Camisea?

*Answer.* The United States was the only board member not to support IDB financing of the Camisea project due to concerns about the IDB's financial additionality and the project's compliance with our environmental standards.

Prior to the board vote, the United States was instrumental in incorporating many loan conditions to strengthen the project's environmental and social protections.

The Camisea project has not come back for the board to consider additional financing since it was initially approved. There have, however, been some IDB management briefings to the board on the status of the project, especially at the point of financial closure and disbursement.

Regarding Peru LNG (Camisea II), on July 26, an IDB mandate letter was signed (giving a green light for IDB appraisal to proceed), and United States Ex-Im Bank has received an application from Hunt for financing. Hunt is currently engaging in various preconstruction activities on its LNG site and in the gas fields. Hunt has created a relatively detailed project Web site, as has the IDB. On September 8, IDB held a civil society meeting on Peru LNG to discuss and generate recommendations regarding the environment and social strategy and continues to hold biannual civil society meetings on Camisea I.

Please find attached a copy of our board statement from 2003 on Camisea I. (This information appears at the end of this question and answer section.)

#### CHAD-CAMEROON PIPELINE

*Question.* How did the United States vote on the Chad-Cameroon gas pipeline when it first came to the executive board of the World Bank? What concerns did the United States raise at the board meetings on Chad-Cameroon? Could you please provide a copy of the United States Executive Director's board statement on Chad-Cameroon?

*Answer.* After extensive discussions with the World Bank, other shareholders, and a wide variety of other interested groups, and after securing substantial improvements and safeguards on a range of key issues, the United States agreed to support the pipeline project. The United States was concerned about the risk of misuse of funds and the weaknesses in capacity that have long defined the Chadian state, so it sought ways to mitigate the role that large inflows of funds would have on the fragile economy. The United States, however, recognized the vast potential for revenue generation and growth that the pipeline presented, so it wanted to find ways to ensure that the project benefited a broad segment of Chadian society. To mitigate potential risks, the United States and other donors insisted on the creation of the revenue management supervisory board (known as the college) and strengthened treatment of environment and social issues. These changes were necessary to ensure that oil revenues were directed effectively toward poverty reduction and economic growth activities. While supporting the project, the United States recognized there were still significant implementation challenges that would require regular monitoring by the World Bank, NGOs, and concerned shareholders.

Key to the United States' support of the pipeline financing itself was the United States' support of related World Bank loans to help build Chad's institutional capacity in petroleum revenue management and to strengthen Chad and Cameroon's abilities to manage environmental and social issues related to this project. The United States has long-believed that the pipeline project will not sustainably reduce poverty if there are not simultaneous improvements in governance and capacity-building in Chad.

Please find attached a copy of the United States' position on the Chad-Cameroon pipeline from 2000. (This information appears at the end of this question and answer section.)

*Question.* On what date did the Treasury Department receive notification about the World Bank's agreement with Chad that was announced on July 14, 2006? What is the Treasury view of this agreement? Is it a positive step forward or is it going to avoid scrutiny of the windfall of petrodollars that are not covered by the agreement?

*Answer.* Treasury received notification of the agreement on July 14, 2006. Treasury was aware that a high-level Chadian delegation was in Washington, DC, the week of July 10 to negotiate an agreement with the World Bank and received periodic updates from Bank staff throughout the week on the negotiations. Treasury also spoke with Chadian Ambassador Bechir that week to discuss the status of the negotiations. At the time of my testimony before the Senate Foreign Relations Committee, however, we did not know the outcome of those negotiations.

After we received the notification of the agreement, Treasury requested additional background information from World Bank staff. Based on that, we understand the agreement, signed July 13, was the outcome of a long negotiation and includes some compromises on both sides. The Chadian authorities agreed that a large portion of their total revenue needs to be dedicated to fighting poverty, and that they must improve transparency and accountability in economic management. The original Petroleum Revenue Management Law (PRML) stipulated a strict allocation of only the direct oil revenues and only from four oilfields of the Doba fields. These direct oil revenues were allocated among the Fund for Future Generations (10 percent), the priority sectors (72 percent), the local authorities in the oil producing regions (4.5 percent), and the current expenditures of the budget (13.5 percent). Under the new

Memorandum of Understanding, for the 2007 budget, 70 percent of all revenues (regardless of source as opposed to only direct oil revenues from the four Doba fields under the PRML) are to be devoted to poverty reduction spending programs. These programs specifically include expenditures on education, health and social affairs, infrastructure, rural development, and governance (e.g., justice, anticorruption, and decentralization). There is no requirement under the new agreement that funds be automatically deposited in a Fund for Future Generations. If total revenues exceed the annual expenditures agreed in the Medium Term Expenditure Framework, the excess is to be deposited into a stabilization fund for future availability. As the rules that guide the use of that stabilization fund are developed, the international community will need to watch carefully to ensure that appropriate safeguards are developed. The Memorandum of Understanding will remain in force until the completion of an updated Poverty Reduction Strategy Paper, which will provide the basis for the 2008 budget.

Although the changes are substantial, they still broadly provide that a high volume of new revenues will be dedicated to critical priority spending needs. In essence, Chad has committed to improve the transparency and accountability of its overall budget process, including the collection and expenditure of all direct and indirect oil revenues from all oil fields, in exchange for broadening the definition of priority programs and eliminating the Fund for Future Generations. For example, Chad has agreed on a framework to modernize public finances, to audit its oil revenue accounts, and to strengthen the college, which will maintain its oversight of the use of oil revenues. Finally, the agreement ensures that the World Bank still has a legal framework to support the Government of Chad's pro-growth and poverty reduction programs, and to insist on strong oversight.

We will continue to engage with World Bank staff regarding the implementation of the MOU covering Chad's 2007 budget. Similarly, Treasury has supported the GOC's transparent management of its oil revenue. The Office of Technical Assistance has provided oil revenue allocation, expenditure control, and procurement assistance to the college since 2001. Until recently, a resident budget advisor has been helping the college cope with its increased work load and responsibilities under the new oil revenue regime. However, that program has been suspended temporarily due to security concerns.

#### TREASURY ACTIONS

*Question.* In testimony before Congress in March 2006, you indicated that although Treasury does not have an estimate of the share of World Bank lending that is lost to corruption, no loss of funds is acceptable. Given that tighter controls typically imply both larger administrative costs and slower disbursements, does Treasury see any trade-offs between implementing programs and keeping administrative overhead low, on the one hand, and combating corruption, on the other? Or are they truly not goals that are at odds? What is Treasury's perspective about this?

*Answer.* We do not view the trade-off as one between "administrative" costs associated with stronger oversight and funds available for projects. The real trade-off is between funding lost to corrupt and/or ineffective projects and funding available for the implementation of effective projects that deliver real benefits to the citizens of borrowing-member countries. That trade-off is not a difficult choice, and we do not see the particular goals of strong oversight and effective project implementation as being at odds with one another.

Also, it is not clear to us that administrative, or oversight, expenses will increase if, overall, the Bank effectively tailors its programs and projects to the risks in each country. To the extent that expenses associated with stronger oversight do increase, however, they will be used to help ensure that projects deliver the intended benefits and are not lost to corruption or generally wasted, providing an overall net benefit.

*Question.* The World Bank does not have a truly independent audit committee or employ outside auditors to objectively evaluate project performance. In light of Sarbanes-Oxley and the acknowledged benefits of true independence in auditing, does Treasury believe that any changes are required in the evaluation/auditing functions of the World Bank or other multilateral development banks?

*Answer.* We believe that the World Bank Group's current division of evaluation/auditing responsibilities is appropriate and will push—as needed—to strengthen these oversight functions in all the MDBs. At the World Bank, these evaluation/auditing functions are performed by a private sector audit firm, the Independent Evaluation Group, and the Internal Audit Department (IAD). Strong oversight of the auditing/evaluation functions is currently exercised by the board of executive directors

of the World Bank Group, through the Board's Audit Committee and the Board's Committee on Development Effectiveness.

First, concerning the audit of MDB financial statements, all the MDBs have their financial statements audited by internationally recognized private sector audit firms. For example, the World Bank Group's current auditor is Deloitte & Touche (D&T).

Second, with regard to project performance, the World Bank Group's Independent Evaluation Group (IEG) is widely respected for its evaluation of Bank projects and programs. The IEG reports directly to the executive board—not to senior management or the President. The IEG's budget and work plan are discussed and approved by the executive board. The head of IEG can only be hired or removed with the consent of the board. We have been pushing at all the regional MDBs to put in place a strong independent evaluation function modeled on that of the World Bank. We are making progress, but there is more to do.

Third, we want to assure you that the World Bank Group has a strong and effective Internal Audit Department (IAD). IAD is playing a key role in strengthening internal controls, the efficiency and effectiveness of operations, and the management of trust funds. IAD's work program and results of its audits are discussed with the President and with the board's audit committee. IAD meets quarterly with the audit committee in executive sessions (without management present). There are ongoing discussions about the role of the audit committee in the hiring and removal of the auditor general. Currently, the audit committee is "consulted." We are pushing for "concurrence" which would enhance the audit committee's role.

We have been working with our executive directors in all of the regional MDBs to strengthen the role of internal audit in each institution.

*Question.* What process is in place to include external consultation/public comment in the World Bank's anticorruption strategy which is expected to be submitted by management to the executive directors toward the end of summer and to the development committee at the annual meetings this fall?

*Answer.* The World Bank Governance and AntiCorruption Strategy was officially presented to the joint IMF/World Bank Development Committee this past September at the annual meetings. In advance of these meetings, the Bank posted the strategy paper on its Web site, inviting public comment, and Bank management held consultations with other multilateral development banks, the IMF, and a number of other NGOs and outside observers.

Following the development committee meeting, and at the urging of Treasury and our Executive Directors Office, Bank management held more extensive consultations. These consultations were held with a wide range of stakeholders in more than 40 developing countries, as well as with donor country governments, Bank staff, and outside observers. In addition, Bank management continued to solicit public comment on the World Bank Web site. Consultations concluded on January 26, and Bank management provided an informal summary of the results on January 30. Management intends to return formally to the board in March (and to the development committee in April) with detailed plans on how it intends to operationalize the strategy. We will continue to work with management to ensure effective implementation.

#### INFRASTRUCTURE

*Question.* Which of the five multilateral development banks are expected to focus on infrastructure as part of their strategy going forward? How are they implementing the infrastructure strategy? Does it vary by bank? If so, how?

*Answer.* All of the development banks are intensifying their support for infrastructure through direct financing, capacity building, and analysis, and policy reform. Specifically:

- The World Bank, in 2003, adopted an infrastructure action plan to revitalize its infrastructure operations, which had been declining. Demand has been strong, and Bank lending for infrastructure has increased by about \$1 billion per year.
- African Development Bank President Kaberuka recently reasserted the importance of infrastructure to Africa's growth and regional development. The AfDB has also been increasing its support for infrastructure in Africa, including urgently needed water resources development.
- Infrastructure has been a consistent focal area of the EBRD. The EBRD's Municipal and Environmental Infrastructure (MEI) Operations Policy guides the Bank's operations in each of the main subsectors (water and wastewater, urban transport, solid waste management, and district heating).

- At the Asian Development Bank, infrastructure accounted for 60 percent of lending in 2005. In 2005, the AsDB, in collaboration with the World Bank and Japan, issued a blueprint for meeting Asia's large infrastructure challenges.
- Between 1995 and 2005, the Inter-American Development Bank provided \$8.4 billion in loans for infrastructure, increasingly to the private sector. Since its inception in 1994, the IDB's Multilateral Investment Fund has made more than 100 grants totaling \$87 million to support legal and regulatory reform, privatization of utilities, sector restructuring, and institutional strengthening. IDB President Moreno has cited infrastructure as one of the IDB's priorities for the region.

Given their own resource constraints, the development banks are placing higher importance on coordination with other donors and leveraging private sector resources. The African Development Bank, for example, has established an infrastructure consortium to coordinate the work of donors and African countries. Several banks have set up special facilities to help countries mobilize capital for infrastructure, such as the African Development Bank's infrastructure project preparation facility. Similarly, the IDB approved a facility intended to help catalyze private sector investment in infrastructure in the region.

*Question.* How are the lessons learned in the January 30, 2006 World Bank publication "Scaling Up Infrastructure: Building on Strengths, Learning From Mistakes" being integrated into the infrastructure projects financed by the other multilateral development banks?

*Answer.* The World Bank has described five lessons in "Scaling Up Infrastructure" for its future efforts in the infrastructure sector:

1. Projects need to balance economic growth with access for the poor.
2. The entire range of public-private solutions must be considered.
3. Project design should address social and environmental impacts from the initial phases.
4. Projects must clearly address the potential for corruption.
5. The World Bank cannot neglect the basics of good technical designs, economic analyses, and implementation arrangements.

These lessons have coincided with a major shift in World Bank infrastructure operations. For example, World Bank projects increasingly seek to expand access and target service delivery to the poor, and the World Bank has stepped up efforts to address corruption. The Bank has launched a pilot program to sharpen its risk analysis for infrastructure projects, and develop triggers to identify and address problems quickly when they arise.

All the development banks have adopted environmental and social safeguard policies, some of which have been strengthened under U.S. pressure. Treasury closely monitors the application of these policies.

The development banks, also under U.S. leadership, have strengthened their results frameworks, although more work is needed to ensure consistent implementation and greater selectivity. The banks also continue to face disbursement pressures, something we have been fighting. Pressure to lend can undermine performance in all sectors, by emphasizing volume over quality.

The banks, through their private sector windows, engage private partners in infrastructure projects and seek to structure infrastructure projects in a commercial manner to ensure quality, efficiency, and financial viability.

We will continue to monitor MDB policies and operations to see that they reflect the lessons of experiences and best practices.

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RESPONSES OF HON. CLAY LOWERY TO QUESTIONS SUBMITTED BY SENATOR PAUL  
SARBANES FOR THE RECORD

*Question.* It is my understanding that the United States has arrearages to the Multilateral Investment Fund (MIF) of nearly \$27 million, and to the Inter-American Investment Corporation (IIC) of about \$46 million. Why has the Treasury Department not sought, in its fiscal year 2007 budget request, any payment at all toward reduction of those arrearages?

*Answer.* For the fiscal year 2007 budget, the administration requested \$1.329 billion for scheduled annual commitments to the multilateral development banks, including \$25 million for the first of six payments to the first replenishment of the Multilateral Investment Fund (MIF-II). Fully funding the budget request will prevent arrears from rising further, and we are concerned that only \$15 million has been provided to the MIF by the Senate Appropriations Committee in action to date.

In fact, the Continuing Resolution (P.L. 109-289) will have the effect of only providing \$1.7 million for the MIF, thus adding substantially to our arrears. The administration is also requesting authorization for the United States contribution of \$150 million to the MIF-II replenishment.

The administration did not seek funding for arrears in the fiscal year 2007 budget request. The request is based on what the United States has pledged in replenishment negotiations to the respective institutions. We are seriously concerned about the growing arrears to these institutions and continue to stress the importance of fully funding the fiscal year 2007 request to stop the trend of rising arrears.

*Question.* Are any of the other shareholders to these institutions in substantial arrears?

Answer. The United States is the largest contributor to the Inter-American Investment Corporation (IIC), having subscribed to \$125 million of shares in the most recent capital increase of \$500 million. U.S. arrears of \$46 million are the highest among the eight countries which are in arrears on capital payments to the institution. Argentina's arrears to the IIC are the next highest at \$34 million.

The United States is the largest contributor, along with Japan, to the Multilateral Investment Fund (MIF) and is the only country in arrears. The U.S. voting power in the MIF is currently 32.5 percent and upon completion of U.S. contributions of \$150 million to the MIF-II replenishment, our voting power will increase to 39.3 percent if our pledge is fully funded.

*Question.* Are we in danger of losing our vote at the IIC? If we lost our vote, what would be the impact on IIC policy directions and operations?

Answer. The United States will not lose its vote at the IIC and remains the major shareholder with 24.17 percent of voting power. However, because of our arrears, the United States does not control the 25 percent of voting power required to block a voting quorum. U.S. influence has thus been weakened in that the United States alone cannot now block board approval of a project or policy.

*Question.* Are there any areas in which the United States has met resistance to our positions within the MDBs because of our status as a debtor? Would the United States be in a strengthened position to press for reforms at the MDBs if we were up to date in our dues?

Answer. Yes. The United States pursues an aggressive reform agenda in all of the multilateral development banks (MDBs). While we often encounter resistance to our reform proposals, we have still achieved good overall results in recent replenishments (IDA-14, AsDF-9, AfDF-10, MIF-II, IFAD-7, and GEF-4). Continuing arrears, however, weakens our leadership and influence and prevents us from meeting commitments as scheduled. For example, if IDA is not fully funded in fiscal year 2007, then the United States could be prevented from meeting the President's commitment to the landmark Multilateral Debt Relief Initiative (MDRI) as scheduled. In essence, many countries believe that the United States is trying to achieve significant reforms without paying for them in a timely manner. For instance, this has harmed our efforts in providing debt relief to Liberia. However, we continue to fight for sound reforms to achieve even better results in the MDBs.

*Question.* Total U.S. arrearages to all the MDBs have risen by nearly two-thirds over the past 6 years, from \$451 million in fiscal year 2000 to an anticipated year-end total of \$739 million in fiscal year 2006. Do you regard this as a serious problem? What steps is the administration taking, and at what levels, to deal with the growing arrearages? Since the administration is now about to begin the process of developing a budget for fiscal year 2008, will the Treasury Department propose a plan for paying off those arrearages?

Answer. Yes, rising arrears are a serious concern and undermine the U.S. leadership position in the MDBs, which makes it critically important that Congress fully fund the fiscal year 2007 request of \$1.329 billion so that arrears do not further increase. Arrears were taken into consideration in developing the budget request for fiscal year 2008, and the President's fiscal year 2008 budget includes a request for \$175 million toward payment of U.S. arrears to the MDBs.

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RESPONSES OF HON. JAIME QUILJANDRIA TO QUESTIONS SUBMITTED BY SENATOR  
RICHARD G. LUGAR FOR THE RECORD

*Question.* Have you had any professional relationship with the Camisea project companies?

*Answer.* I was a short-term consultant for TGP, one of the partners of the Camisea project. When I was appointed Minister of Energy and Mines, the contract was canceled by mutual agreement. The public opinion in Peru was aware of that because on July 29, 2001, when I became Minister of Energy and Mines, I made a public statement mentioning the list of companies, international organizations, and NGOs that hired my professional services in the previous 5 years. A copy of this statement was sent to the most important newspapers in Peru. This was the first time that an incoming minister made this kind of disclosure prior to taking office.

*Question.* How, if at all, should the Camisea project be adjusted to maximize benefits for the people of Peru and minimize impacts on the indigenous peoples and the environment?

*Answer.* As mentioned in my statement, there are some recommendations put forward in the ombudsman's report on Camisea that deserve to be discussed and, if accepted by all the parties involved, eventually implemented before starting the second phase of the project. The main recommendations are as follows:

- Approve specific regulations to effectively protect the rights of the indigenous populations in isolation and at first contact;
- Determine assessment criteria that ensure fair compensation for the damages caused;
- Design and implement mechanisms that ensure fair negotiations and technical assistance to the indigenous communities;
- Modify the current legislation on right of way;
- Intensify the state control over the environmental and social commitments undertaken by the companies involved;
- Strengthen the performance of technical and multidisciplinary inspections of the works that the project entails; and
- Extend the period between the release of the studies on environmental impact and the public hearings.

In sum, it is not a matter of "adjusting" the Camisea project but of introducing additional safeguards deemed necessary according to the experience gained during the execution of the first phase.

*Question.* In your oral remarks, you mentioned Nam Theum 2 project that is before the World Bank. Why do you think that the project has been delayed? How do you assess the argument that there are a number of issues that need to be addressed with the project before it moves forward?

*Answer.* The potential for hydropower development on the Nam Theum system in Central Lao People's Democratic Republic (Lao PDR) was first identified by the Mekong Secretariat in the 1970s. The studies undertaken by the Government of Lao PDR identified a series of potential sites for hydropower development of the Nam Theum, which were given numbers for reference purposes, including the Nam Theum 2 site. In 1991, following initial studies, the Government of Lao PDR, with the support of the World Bank and the United Nations Development Program, commissioned the Snowy Mountain Engineering Corporation to undertake a feasibility study for the Nam Theum 2 Hydroelectric Project. Since 1994, and with the support of the Asian Development Bank (ADB), the French Agency of Development, the World Bank, and the Government of Lao PDR, the Nam Theum 2 Electricity Consortium has been responsible for the project design. In January 2004, the responsibilities of Nam Theum 2 Electricity Consortium to develop the project were transferred to Nam Theum 2 Power Company Limited (NTPC), which is wholly owned by four companies: Electricite de France International (35 percent), Electricite du Laos (25 percent), Electricity Generating Public Company Limited (25 percent), and Italian-Thai Development Public Company Limited (15 percent). Finally, on March 31, 2005, the executive directors of the World Bank approved an IDA grant to the Lao PDR, an IDA partial risk guarantee for a syndicated commercial loan to and equity investment in the Nam Theum 2 Power Company Limited for the Nam Theum 2 Hydroelectric Project.

The project will dam the Nam Theum River, supplying the Electricity Generating Authority of Thailand with 1,070 megawatts (MW) of electricity. It is forecast that the project will generate approximately \$1.9 billion in revenues for the government over a 25-year projected concession period. The project is expected to be one of the largest sources of foreign currency income for the government over its lifetime, a very important contribution to the Lao PDR's gross domestic product, and a significant source of fiscal revenues after repayment of the country's commercial debt. Also, the project is recognized by the government as an essential part of the country's development framework to reduce poverty.



It is a huge project. The cost is estimated at about \$1.2 billion. In a country like Lao PDR—with fewer than 6 million people—it is an enormous project. Its cost is equivalent to about 80 percent of the country's total GDP. It is for this reason that the project has attracted a lot of international attention.

In its evaluation, the World Bank views Nam Theum 2 as much more than a hydroelectric project. A detailed assessment was carried out taking into consideration all the potential costs and benefits—not only from a technical and economic perspective, but also from broader social and environmental perspectives.

According to the Joint World Bank-ASEAN Development Bank Report, “the project has commenced well, but work still needs to be done to effectively manage risks and mitigate impacts in the area of environmental and social safeguards, and synchronize these actions with construction momentum. This will require more effective measures to build capacity, strengthen implementation, improve coordination with Lao PDR, and streamline coordination and communications between them. With good progress in tunneling work and significant reduction in geological risks, the project is unlikely to face delays or cost escalation, provided the implementation agencies accelerate implementation of resettlement and mitigation of environmental impacts, and ensure the construction and safeguards measures in tandem.”<sup>1</sup>

In sum, the evaluation and approval of the Nam Theum 2 by the World Bank and other IFIs have taken more than 10 years, with a total cost of almost \$10 billion, which largely exceeds the total aid received by Lao PDR from IFIs. The delay was due, in the first place, to the complexity and size of the project and the reputational risk involved in the operation. There was also strong opposition from NGOs (Friends of the Earth—Japan, Terra, and others). At present, the project is under construction and there are actions to be taken by the implementing agencies of the Lao PDR in order to ensure a successful implementation.

Last but not least, the people of Laos themselves have expressed, in a series of independent consultations, their desire for the project and the benefits it will bring. It is important to see this project in a balanced and informed way. For example, the project will flood a badly degraded area, but it will also ensure that a pristine forest area nine times larger is preserved. It will require the relocation of 6,200 people, but it will provide them with improved housing and higher incomes. It is a major project in a country with limited capacity, but a large number of steps have been taken to help strengthen the government's capacity.

It should not come as a surprise that single-interest lobby groups which oppose all dams, have also opposed this project. But what they fail to offer is a viable alternative. Nam Theum 2 is certainly not a perfect project—perfect projects do not exist anywhere. Nor is it free from controversy—no dam is. But it is a serious, widely supported proposal to help some acutely poor people, to give them a chance to make a decent living and be able to feed and educate their children.

*Question.* You also mentioned the Chad-Cameroon Pipeline in your oral comments. Have the Governments of Chad and Cameroon and the World Bank implemented adequate safeguards to ensure that the revenues generated from the pipeline are used correctly, that compensation is distributed fairly, and that environmental impacts are mitigated?

*Answer.* The most critical and challenging issue faced by the Chad-Cameroon project was the implementation of the Petroleum Revenue Management Program (PRMP) and the decision of the Government of Chad to amend the Petroleum Revenue Management Law (PRML). The PRMP was designated to maximize the poverty-reducing impact of petroleum revenues for the Chadian population, and it was a fundamental and contractual element of the World Bank's support to the project. The World Bank consequently viewed any needed changes to the PRMP as a process to be undertaken and agreed upon mutually and after careful consideration. When the Government of Chad initially raised the issue of revising the PRML to respond to financial difficulties, the World Bank suggested using the entire flexibility of the existing law and implementing the PRMP for a full budget cycle so that a comprehensive assessment could be made to guide potential changes.

The government, without consulting the World Bank, submitted proposed changes of the PRML to Parliament in November 2005, including abolishing the Future Generations Fund (FGF), expanding priority sectors to include others such as justice, territorial administration and security, increasing the percentage of direct oil revenues that can be used in non-priority sectors from 13.5 percent to 30 percent, and expanding the scope of the law to all oil fields. On January 6, 2006, the World Bank suspended new loans and grants as well as disbursements of the ongoing IDA oper-

<sup>1</sup>Lao PDR: Nam Theum 2 Hydroelectric Project Update, The World Bank, March 31, 2006, p. 3.

ations, while reiterating its commitment to assist the government in addressing the country's financial problems. On April 25, 2006, following intense negotiations, the two parties reached an understanding on the resumption of cooperation based on a 3-month interim agreement that would ensure that oil revenues served the Chad's poor and allow more time to develop a comprehensive solution.

The impact of economic growth and oil revenues on the rural population remains to be seen, although efforts to promote linkages between oil production and poverty reduction have continued. The government released the second Poverty Reduction Strategy Paper (PRSP) Progress Report in December 2005 and plans to complete an update of the PRSP strategy by the end of 2006. This exercise, in the opinion of the World Bank, "will offer the opportunity to develop a shared vision of development between the government and stakeholders and to reinforce significantly the coordination between core and line ministries for the implementation of this vision."<sup>2</sup>

All in all, the Chad-Cameroon Pipeline project remains a very high-stake, high-risk venture for the World Bank Group and the lessons learned from this experience will certainly affect the design of similar operations in the future. According to the latest report, "the World Bank team hopes that the interim agreement reached on April 26 will lead to a more comprehensive agreement on the management of oil revenues which guarantees the use of resources for Chad's poor in the long term."<sup>3</sup>

In sum, the Government of Chad and the World Bank agreed on the implementation of adequate safeguards regarding the Chad-Cameroon project. From the experience gained in the operation of the project, additional safeguards are needed. Had the World Bank not been involved in the financing of the project, it would certainly be much more difficult to rectify the situation.

*Question.* According to your analysis, what are specific lessons learned from Camisea I that should be applied to Camisea II?

*Answer.*

- The feasibility of a megaproject like Camisea depends highly on its environmental and social sustainability;
- The IDB's support has been critical to incorporate major improvements in the legal framework based upon the observance of internationally accepted standards. For the second phase of the project, it is fundamental to have the early engagement of the IDB and other IFIs;
- It is necessary to have a program for the protection and defense of the rights of the most vulnerable indigenous populations in the areas where the project is implemented;
- State environmental and social monitoring must be multiagency and system wide;
- The Government of Peru was not adequately prepared to monitor and supervise such a huge and complex project;
- There are specific areas where the learning process has been fundamental: monitoring process, citizen participation, socio-environmental impact prevention, and environmental and social regulation; and
- With the support of IFIs, NGOs and stakeholders, a new environmental scheme for hydrocarbon activities should be designed and implemented.

In sum, the objective should be to achieve sustainable development through the rational exploitation of our natural resources.

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RESPONSES OF HON. CARLOS HERRERA DESCALZI TO QUESTIONS SUBMITTED FOR THE RECORD

*Question 1.* Is Camisea bringing development benefits to Peru and, in particular, to affected communities?

*Answer.* Camisea is bringing benefits to Peru as a total and under a macroeconomical view.

But it is not at the level it should have been done nor the right time to do it. There is a 2-year delay regarding activities that should have been initiated before the project came to an end, as to arrive together with the gas. The state forgot to give enough time and effort to prepare a consumption market in order to accelerate this substitution.

<sup>2</sup> Chad-Cameroon Petroleum Development and Pipeline Project; Eleventh Semiannual Report to the Executive Directors (July 2005–April 2006), The World Bank, June 7, 2006, p. ii.

<sup>3</sup> Op. cit. p. iv.

As the communities are concerned, it is not clear that damage is smaller than the benefits received. It was of importance not only to give money, but to ensure that that money was useful to them or that if it was being used adequately.

*Question 2.* How, if at all, should the project design have been changed to maximize benefits for the people of Peru and minimize impacts on the indigenous peoples and the environment?

Answer. Mainly, by an effort to respect the contracts like they were agreed; especially regarding the application of international standards.

It is important that financing institutions care to the achievement of strategic goals and not only to reduce approval to acceptance of a checklist. It is important to preserve the vision of the project.

The banks assumed the environmental commitment counting with the highest standards, allowing that the financing count with the environmental and social guarantee. However, what it is clear to see is that practice is not always successful.

It is advisable to reformulate the objectives, asking whether Camisea contract has been treated as a checking list or it has taken into account the results. In opinion of Peruvian experts dealing directly with those matters, the Bank should supervise the compliments of these objectives that will be mentioned below:

- Camisea Fond (FOCAM): It was originally conceived as an instrument to help that the financing could reach the local communities for their development. The state, before complying with these objectives, gave the Camisea Fond a meaning of royalties. The Bank only verified the creation of this fond but failed to verify if this financing reached the said benefits for the development of the said local communities.
- Environmental Strategic Evaluations (ESE): Up to this date, it has not been possible to implement this instrument, originally conceived to identify policies and develop programs for projects. The Bank should supervise the comply of this instrument, taking into account that further hydrocarbon projects in the Urubamba area shall be put into consideration that further projects will be presented to the Bank.
- Commission for the Camisea Defend (CCD): The objective to create CCD was to be used as a mechanism to give more transparency to the whole process and to benefit the communities involved. However, to create other parallel institutions (to ombudsman) with these same objectives seems not to be adequate. Another important issue is that this institution does not count with the trust of the indigenous communities. In ombudsman report No. 103, titled "Camisea Project and Its Effect on Persons."
- Plans of Right of Way: Even though there is a commitment with the Bank for the reforestation of the involved areas planned for the access control and a plan for the migration control, none of these have been observed.

After the five failures of the tubing, it can be observed that the project has technical problems, a situation that gives uncertainty with respect to the way that the social and environmental policies want to be implemented in the Camisea project.

*Question 3.* If there have been negative impacts in Peru from this project, how could they have been avoided?

Answer. Most of the problems arise from the lack of supervision and political willing to sanctions. Most of the finings of OSINERG were not effective.

Asking persons involved in Camisea project, the following proposals were mentioned:

(a) Selecting companies that are willing and able to invest up front to avoid, mitigate, repair, and/or compensate the direct and indirect social and environmental impacts.

Main criterion for the selection process was the amount of royalties to be paid. Companies did not have to prove their environmental and social performance.

(b) A proper legal framework is necessary as well as strengthening of institutions in charge of supervision and control.

It could be observed that each productive sector has its own small environmental office in charge of approving the environmental impact assessments, to be coordinated by the CONAM which has the mandate to coordinate among the different sectors.

As a result of structural reform during the 1990s, government was radically downsized, in part due to recommendations of multilateral banks. This downsizing also included institutions regulating and supervising productive activities. The structural reform also made it very difficult to create new permanent positions in any government institution, a good policy to avoid senseless hiring but it backfires now when the need for a stronger supervision is apparent.

Lack of funds implied that OSINERG staff had to rely on consortium logistic to get to the areas to supervise.

Even with such difficulties, OSINERG imposed two fines during construction amounting to US \$1,700,000. Fines are not a deterrent because companies can always sue the government and keep the litigation for years.

(c) Companies should have been forced to use Shell's standards in terms of transparency of information, participation of civil society, involvement in local development, care for the environment, etc. Banks should have really enforced its loan conditions.

(d) Government and Bank should have supported communities to negotiate with companies.

Based on opinions of involved parties, information was received that companies used their own criteria, their sheer strength and intimidation tactics to negotiate compensation and reparations with communities during construction and operation. Dismal differences among communities increase the feeling of unfair negotiation conditions.

(e) Time goals set should have been more realistic and production start should have been postponed to allow for a more careful construction.

The completion of the project on time was the only important consideration for government, without regarding consequences. Five reported large leakages, breakages, or spills in the first 18 months of operation, this point to severe deficiencies in the design and/or execution of the project. There were reports (URS and Knight Piesold) that repeatedly point out that construction (opening the right of way and installing the pipes) went far too fast for the revegetation and erosion control crews to keep up the pace, they were severely understaffed.

(f) Soil study should have been conducted to guide the design and soil stabilization needs.

From the onset it was clear that the project was to have a lot of problems related to steepness of the terrain, soil instability, extreme rainfalls, and isolation, among others. According to the conclusions of the commission of the Peruvian Congress, the path of the pipeline was designed without a proper soil study. Periodical reports from URS stated again and again the need to take soil stabilization and erosion control seriously.

(g) Government should have been taking the right approach to strengthening its institutions, as perhaps giving CONAM a stronger mandate.

Camisea Defense Committee (CDD) was perceived as a trick to get ombudsman out of the way. In spite of this maneuver, ombudsman published a long report with all the instances where the project violated people's rights, holding the companies and the government itself responsible for these violations.

CONAM states in a report that the Camisea project with its ad-hoc solutions to favor the projects, implementation has undermined the ability of the government to fill out its role of environmental advocacy.

The organism for Paracas Bay was created right before the approval of the loan, but funds to implement its activities only were available 10 months later.

(h) Government should have heeded civil society's advice or demands for an audit to the construction process and the environmental and social impacts to reestablish confidence in the government and companies' intention.

Problems with the selection of the plant in Paracas, change of use, partial EIA, etc., brings the impression that everything was possible to keep the time schedule. Five spills had to occur until audits were commissioned by the government and the Bank.

(i) A proper strategy to deal with vulnerable groups should have been put in place to protect the people.

*Question 4.* Have the Government of Peru and the Inter-American Development Bank implemented adequate safeguards to ensure that the revenues and royalties generated from the pipeline are used correctly, that poverty reduction and development benefits are maximized, that compensation is distributed fairly, and that environmental, social, and health impacts are prevented or mitigated?

Answer. Regarding these issues, the testimony that I can give should be considered as indirect as though I have not directly participated in these processes. I have had the opportunity to get in touch with formal related organizations like Asociacion Civil Labor, Derecho Ambiente y Recursos Naturales (DAR-Peru), Escuela para el Desarrollo, World Wildlife Fund—WWF (WWF-Peru), Sociedad Peruana de Derecho Ambiental (SPDA) and Oxfam America.

Through their statements, arguments, and after verifying the solidity of their answers, which have appeared to me that they are consistent, it can be deduced that the Peruvian Government and the Bank have not been able to reach too much suc-

cess over the items that covered this question. The results that have been reached are far away of what they should have been obtained. What has been done mainly is a checking list with items that have been taken as objectives, to only say that the activity had been complied, but without previously verify its true compliance. All the expenses that were made, just upon checking a list filled out in a routine way, just gave a result that the goals were not reached.

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RESPONSES OF DR. KORINNA HORTA TO QUESTIONS SUBMITTED BY SENATOR RICHARD G. LUGAR FOR THE RECORD

*Question.* Have you had any professional relationships with the Chad-Cameroon project companies?

Answer. No, I don't have and never had professional relationships with any of the companies involved with the Chad-Cameroon project.

*Question.* How should the project and revenue management design be changed to maximize benefits for the people of Chad and Cameroon and minimize impacts on the affected people and the environment?

Answer. There are two key problems that should have been addressed before the project was approved by the World Bank: (a) Lack of demonstrated government commitment to poverty reduction; and (b) lack of institutional capacity to manage the economy in the oil-era (in Chad) and to address the environmental, social, and public-health-related impacts of a project of this magnitude.

Although it is more difficult to address these problems now, it is critical that the World Bank use its leverage and resources to:

In the case of Chad:

- Strengthen the oversight committee charged with ensuring that oil-related revenues are used for poverty reduction (70 percent as per the World Bank's new agreement of July 14, 2006); and
- Ensure that the reports by the oversight committee lead to concrete follow-up action and corrective measures and/or sanctions as necessary.

In the case of Cameroon:

- Ensure that the government use oil royalties for adequate compensation to affected communities and the restoration of livelihoods; and
- Ensure that the indigenous Bagyeli people continue to have access to their traditional forest lands and that they receive land and other adequate compensation where full access cannot be restored.

In both Chad and Cameroon:

- Renew efforts to build government capacity to address the environmental, social, and public-health-related problems related to the project; and
- Actively monitor and report on how these problems are being addressed.

*Question.* To your knowledge, was civil society given the opportunity to provide input into the agreement announced by the World Bank and Chad on July 14, 2006?

Answer. To my knowledge, civil society in Chad, as well as internationally, did not have the opportunity to provide input into the agreement announced by the World Bank and Chad on July 14, 2006.

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RESPONSES OF MANISH BAPNA TO QUESTIONS SUBMITTED BY SENATOR RICHARD G. LUGAR FOR THE RECORD

*Question.* Have you had any professional relationships with the Camisea project or Chad-Cameroon project companies?

Answer. No, I do not have any professional relationships with such project companies.

*Question.* In your testimony, you note that there is a "long record of failures of many large, high-risk infrastructure projects." Why do these projects continue to receive funding if they keep failing to produce positive development outcomes? How can the MDBs and the administration resist political pressure to fund high-risk projects?

Answer. Funding continues for large high-risk infrastructure despite repeated failures because powerful, vested interests stand to gain from such investments. Reasons include:

- Ministers/MoF/MoI/MoE: Projects tend to serve broader political objectives and ambitions.
- MDB boards and management: Keen to lend money—preferably in large tranches.
- Bureaucrats and politicians gain handsomely through widespread corruption.
- Multinational and domestic firms benefit from lucrative supply and construction contracts.
- Macroeconomists stubbornly adhere to the belief that big projects promote growth and this is all that is needed to reduce poverty. Engineers (and I am one) also subscribe to the “bigger is better” theory. Economists suffer from the age-old problem that large infrastructure works in theory but not in practice. Whereas what I term “smart infrastructure” works in practice but not in theory.

MDBs and the U.S. administration do have an important role play. They can't dictate which large infrastructure projects are in a country's best interest. But they can insist on a robust process and can encourage lending in new, more pro-poor areas through sector/subsector lending targets:

1. Recommendations mentioned earlier on options assessment can help insulate the selection process from political, vested interests—by creating a more transparent, inclusive, and accountable environment in which decisions are taken.

2. Moreover, lending targets encouraging a shift to smart infrastructure would provide MDBs with a legitimate reason to decline considering high-risk, politically-motivated projects.

3. A third recommendation focuses on governance, which is a salient theme in the project cases discussed today.

Infrastructure projects whose poverty-reduction potential depends on revenue generation can only succeed in a context in which there are basic assurances of a minimum level of government accountability to the public. Benchmarks for good governance should be met prior to MDB support for large, high-risk infrastructure projects. Numerous projects (and Chad-Cameroon most vividly) illustrate the risk of supporting projects before such capacity is in place. It is much easier to construct a dam or pipeline than it is to build good governance. By waiting until good governance in a country is demonstrated, the risk of supporting politically-motivated infrastructure that fails to deliver positive development outcomes is significantly reduced.

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ARTICLE FROM ETHICS WORLD WRITTEN BY PETER BOSSHARD OF THE INTERNATIONAL RIVERS NETWORK AND SHANNON LAWRENCE OF ENVIRONMENTAL DEFENSE

#### THE WORLD BANK'S CONFLICTED CORRUPTION FIGHT

World Bank President Paul Wolfowitz has called corruption the single most important obstacle to development and has ratcheted up the fight against graft in Bank projects. While this effort is welcome, it is being undermined by the Bank's simultaneous increase in infrastructure lending. The experience of Pakistan's water sector shows that the Bank's self-interests facilitate rather than discourage corruption in infrastructure development. Unless the World Bank addresses upstream the corruption incentives that drive infrastructure decisions, the poor will continue to be deprived of access to essential services.

After closely following the script of his predecessor, in early 2006 the new President of the World Bank, Paul Wolfowitz, finally revealed his own vision for the embattled development institution. Identifying corruption as the single largest obstacle to development, he held up loans to India, Bangladesh, Kenya, and Chad because of corruption concerns and increased the budget of the Bank's anticorruption unit. “This is about making sure that the Bank's resources go to the poor and don't end up in the wrong pockets,” Wolfowitz told U.S. News & World Report. “It is about fighting poverty.”

Critics have long accused the Bank and other donors of turning a blind eye to the leakage of development funds, leaving corrupt contractors and officials flush with cash, governments saddled with “white elephant” projects and odious debt, poor people devoid of essential services, and the environment unprotected. The World Bank began to address the “cancer of corruption” under President Wolfensohn, and Paul Wolfowitz's pledge to “move from talking about corruption to dealing with corruption” is welcome. Yet the world's largest development institution still attempts to treat the symptoms and not the cause of the disease. In fact, the Bank's current lending strategies might even be fueling the corruption epidemic.

Just as the Bank vows to get tough on corruption, it has simultaneously announced a big increase in its support for infrastructure, the sector perceived to be the most corrupt globally according to Transparency International. In fact, approxi-

mately half of the World Bank anticorruption unit's investigations that have led to specific corrective actions were linked to infrastructure projects.

Massive, centrally planned and financed water, energy, transport, and other public works projects are particularly prone to corruption, thanks to their complexity, capital intensity, and high price tags. They offer larger spoils than small-scale projects and programs to increase the efficiency of existing infrastructure. Unless corruption is checked in the earliest stages of the planning process, corrupt politicians, government officials, and construction companies will always favor large-scale projects to address a country's infrastructure needs.

Development efforts can only be effective if they reflect a country's own priorities. The World Bank has acknowledged the importance of "country ownership" in recent years. Yet it has tended to equate country ownership with government ownership and government ownership with ownership by finance and infrastructure ministries. The Bank has limited the opportunities for civil society input in the development of infrastructure strategies, and cut down the preparation time for infrastructure projects.

Combined, the Bank's push into infrastructure, the emphasis on government ownership, and the limited accountability to civil society are creating large opportunities for corruption in a sector in which graft is already endemic. If the World Bank does not address the incentives for corruption upstream, fighting graft in individual contracts will be a losing battle. If its fight against corruption continues to be focused reactively on specific projects, infrastructure development will remain distorted, the poor will be deprived of essential services in many countries, and the environment will continue to be neglected.

#### *Infrastructure, corruption, and development failures*

Building infrastructure projects in the developing world is a \$200 billion business that provides a plethora of opportunities for corruption. Bribes are paid to secure concessions and kickbacks are provided in exchange for contracts. Bid rigging occurs, shell companies are established, and procurement documents are falsified. Substandard materials are used in construction, regulators are paid off, and prices for infrastructure services are inflated. Compensation for forcibly displaced communities ends up in the pockets of bribe-seeking local officials. The World Bank acknowledges these corruption risks, but it has not figured out what to do about them. A recent Bank report about infrastructure acknowledges that "anticorruption is the area where the largest gaps remain in our understanding of what works and what does not."

Given the enormous potential pay-offs, it is not surprising that there are often powerful vested interests behind big, new public works projects. Peter Eigen, the founder of Transparency International, argues that corruption in the construction sector not only plunders economies; it shapes them: "Corrupt government officials steer social and economic development toward large capital-intensive infrastructure projects that provide fertile ground for corruption." Paul Collier and Anneke Hoeffler explain: "If budget decision-makers themselves are corrupt, they may decide to skew the budget towards infrastructure spending so as to increase the opportunities for corruption. If roads are more capital-intensive than primary education, the budget may be skewed towards roads . . . and if there is more opportunity for corruption in road construction than in road maintenance, then roads may be built, allowed to fall apart, and then rebuilt."

Similarly, large dams, massive irrigation systems, and river diversion schemes, some constructed with World Bank support, are often touted as the solution to the water and energy needs of the poor. Rarely, however, are alternative options assessed. The World Commission on Dams (WCD) pointed out that "the pressure on development aid agencies to move large amounts of capital . . . argued for large-scale solutions such as large dams." Even as large dams have provided fewer than anticipated benefits, forced tens of millions of people from their lands, and destroyed rivers and river-based livelihoods, they have tended to prevail over alternative options. The WCD noted: "Decision-makers may be inclined to favor large infrastructure as they provide opportunities for personal enrichment not afforded by smaller or more diffuse alternatives. The consequences frequently directly affect the poor and the environment."

The political economy of infrastructure development "doesn't just line the pockets of political and business elites; it leaves ordinary people without essential services," according to Peter Eigen. The push for big projects diverts resources from decentralized, community-based options and from the maintenance of existing infrastructure. Ultimately, local people are stuck with the economic, social, and environmental costs of infrastructure projects that may not be the best option for providing water or en-

ergy services—or may not even be providing them at all. These two problems, namely corruption and unmet needs for infrastructure services, are closely linked.

*The Pakistan case*

Pakistan's Indus Basin Irrigation System, the world's largest water diversion scheme with more than 1.6 million kilometers of watercourses, is a prominent example of how corruption pervades economic development and distorts the priorities of infrastructure investment. It also shows how the World Bank's business model and development paradigm encourage rather than counteract the pervasive dynamics of corruption.

Pakistan's irrigation system has been shaped by the World Bank's approach to water infrastructure for five decades. In the 1950s, the bank brokered a water treaty between India and Pakistan which created the foundation for irrigating the Indus Basin. It helped devise the policies and institutions of Pakistan's water sector in a series of master plans and reports, and has loaned almost \$20 billion (in 2005 prices) for projects in the sector.

The Indus Basin Irrigation System is a central planner's dream turned concrete. Its corner stone, the Tarbela Dam, was the largest manmade structure on earth at the time of its construction. Tarbela is just 1 of 19 dams that block and divert the basin's mighty rivers. Large canals, drainage highways, and more than 100,000 distributaries crisscross the Indus basin.

Today, the Indus Basin Irrigation System serves an area the size of Bangladesh, and generates more than one fourth of Pakistan's electric power. Yet the system is in deep crisis. The irrigation network operates extremely inefficiently, and sedimentation is rapidly reducing the capacity of its reservoirs. More than 60 percent of irrigation water is lost from the canal head to the root zone, and a lot of water is wasted on thirsty crops such as sugar cane that are not suited to the arid Indus Basin. Average crop yields are much lower than in neighboring India.

The construction of reservoirs and canals caused the forcible displacement of more than 200,000 people in Pakistan. Decades after they were moved, thousands of families are still living in misery. A report prepared for the World Bank argues that the lack of replacement land and corruption in the system are "creating extreme hardship for people."

Pakistan's irrigation network has always served the privileged elite at the expense of the poor. World Bank and government programs have consistently favored feudal landowners. When the irrigation system was established, the government failed to recognize the land rights of the original inhabitants and allotted irrigated plots to rich landowners and military personnel. While large and very large farmers control 66 percent of all agricultural land in Pakistan, almost half of all rural households own no land. A World Bank evaluation noted in 1996 that the bank's projects "provided large and unnecessary transfers of public resources to some of the rural elite."

The top-down engineering approach to Pakistan's water sector has also caused massive collateral damage downstream. The Indus Basin Irrigation System starves areas of Sindh province—and particularly the Indus Delta—of water and sediment. And because the sediment trapped in the reservoirs does not replenish the delta, close to 5,000 square kilometers of farm land have already been lost to the sea. Meanwhile salt water is intruding 100 kilometers upstream in the Indus. The lack of water and sediment is destroying flood plain forests that are home to hundreds of thousands of people and mangrove forests that help protect the coast against storms.

While the downstream areas suffer from a water shortage, wasteful water use is wreaking environmental and economic havoc in the command area. Over-irrigation and inadequate drainage have caused the water table to rise across a large area. As a result, about 60 percent of all farm plots in Sindh are plagued by water logging and salinity.

*Corruption in Pakistan's water sector*

Pakistan's water sector, like many of those around the world, is fraught with large- and small-scale corruption. According to a 2003 survey by Transparency International, Pakistan's Water and Power Development Agency is perceived to be the second most corrupt institution in the country. Close to half of the more than 31,000 complaints received by Pakistan's anticorruption ombudsman in 2002 were related to this one institution. As the World Bank's 2005 Pakistan water strategy admits, top positions in the country's water bureaucracy are sold at a high price.

Corruption works in a variety of ways in Pakistan's water sector. After paying high sums to secure senior government positions, officials need to recoup their costs in the form of kickbacks. They can do so primarily through projects that serve con-



struction companies and large landowners, not through improved maintenance programs and low-cost projects that serve the poor. This is why the water bureaucracy, as the World Bank puts it, suffers from a “build-neglect-rebuild” syndrome, and “has yet to make the vital mental transition from that of a builder to that of a manager.”

Even resettlement programs are a source of patronage, which rewards rather than penalizes large-scale displacement projects such as dams and canals. “Pakistan has well established corrupt practices in the revenue departments that hurt the interests of those who are resettled,” notes Pervaiz Amir, a consultant to the World Bank on large dams. “The manner in which resettlement and rehabilitation is handled becomes susceptible to patronage and corruption and it becomes difficult to ensure that every affected person is treated fairly and receives his or her due share.”

Many officials in Pakistan’s water sector also allocate irrigation water to the highest briber and not necessarily to the most needy or productive farmers. “Payments to irrigation officials to ensure the delivery of sanctioned water supplies were reported as routine and endemic” the World Bank found in 2002, and “water availability clearly depends on efforts to bribe irrigation officials.”

Corruption is allowed to flourish because Pakistan’s water sector lacks transparency and accountability. Water allocations at all levels of the irrigation system are not disclosed to the public, for example. The World Bank concludes: “In the shadows of discretion and lack of accountability, of course, lurk all sorts of interests—of powerful people who manipulate the system for their ends, and of those in the bureaucracy who serve them and are rewarded for this service.”

#### *Alternatives exist*

Brick-and-mortar investments in centrally managed dams and canals are not the only way to address Pakistan’s water and energy needs. Because the existing infrastructure is not being properly maintained and so much water is being wasted, the efficiency of the irrigation system could be greatly increased. Plugging the leaks of the existing system is environmentally more benign than building new dams and canals.

It is also more economical. A World Bank evaluation found in 1996 that water conservation measures saved more water than the largest new dam in Pakistan’s investment program could have stored, and at one-fifth the cost. The Asian Development Bank estimates that an additional 4.7 million acre-feet of water could be provided either by conservation measures at a cost of \$1.7 billion, or by a new dam with a price tag of \$4.5 billion.

Decentralized and nonstructural solutions to Pakistan’s water crisis also exist. The Indus Valley has huge groundwater reservoirs, which could store many times as much water as all future dams. Recharging these reservoirs would require more sustainable flood management practices which allow the Indus to overflow its banks temporarily rather than confine it within massive embankments.

Farmers still irrigate thousands of square kilometers of land through traditional techniques outside the modern canal system, and without support from the government or World Bank. Rainwater harvesting and simple, affordable treadle pumps provide a steady supply of water to farmers, without the added costs of bribes for water officials or diesel pumps. Drip irrigation kits apply water directly to the roots rather than the furrows, and use only half as much irrigation water in the process. An innovative way of planting rice without standing water (called the System of Rice Intensification) allows rice—a particularly thirsty crop—to be grown using only half the amount of water while boosting harvests. Such soft approaches have been adopted with good success around the world, and are being introduced in Pakistan. Shifting control over water resources from bureaucrats and absentee landlords to poor farmers would ensure a more economic use of water, reduce poverty, fight corruption, and protect the environment at the same time.

#### *Slow learners*

In 2003, the World Bank argued that a “genuine paradigm shift” emphasizing the proper management of water resources rather than new infrastructure was needed in Pakistan. Yet the bank’s new water strategy for Pakistan does not reflect this paradigm shift. It asserts that “Pakistan has to invest, and invest soon, in costly and contentious new dams.” The 2005 strategy recognizes the potential for efficiency gains, but does not address the maintenance gap in the water sector, and the serious social and environmental impacts of the current approach.

In January 2006, General Musharraf announced that his government would soon start construction of the Bhasha and Kalabagh Dams. The two dams will cost more than \$20 billion, will displace an estimated 160,000 people, and will further reduce downstream flows.

The World Bank prepared its water sector strategy for Pakistan without any input from civil society. It argued that “while all voices must be heard, much greater weight must be given to the voices of those who have responsibility and face the voters, and less to those who are self-appointed or who represent small special interests.” This is a remarkable statement about a country that is marred by corruption, in which top government positions are for sale, and which is run by a self-appointed military ruler.

Pakistan is a prominent example for the pervasive impacts of corruption on development planning. Yet as Eigen, Collier, Hoeffler, and others have pointed out, the mechanisms that distort the development of Pakistan’s water sector are widespread. White elephant projects that made no economic sense and failed to deliver any developments benefits—like the Bataan nuclear power plant in the Philippines, India’s Dabhol power plant, and the Turkwell Dam in Kenya—can be found around the world.

Why are governments and the World Bank so obviously flouting the lessons of the past? The Bank has always been good at evaluating its own performance, but is notorious for ignoring evaluation findings in subsequent operations. And although Bank managers frequently speak out against corruption, the institution’s self-interests align with and reinforce the interests of corrupt borrowers and contractors in various ways.

The Bank covers its administrative costs from the profits it makes by lending to middle-income countries. It has to continue lending to these countries in order to sustain its own business model. Since middle-income countries can raise capital on the private market, the World Bank must keep its lending costs low so as to not be out-competed by private banks. It is easier and cheaper for the Bank to invest in large brick-and-mortar projects than to process loans for small, decentralized irrigation schemes, or for cheap but institutionally complex programs to improve the maintenance of existing infrastructure.

The interests of the World Bank’s member governments have helped define those of the institution’s bureaucracy. Northern governments favor loans that pay for the contracts of international consultants and construction companies. Borrowing governments prefer bulky projects that yield ribbon-cutting opportunities and political prestige, support centralized bureaucracies, and offer spoils for patronage. The bank’s institutional self-interests translate into an incentive structure that rewards staff for pushing money out the door quickly, and not for achieving lasting developing impacts. For example, Paul Wolfowitz recently promoted the author of the Pakistan water sector strategy to become the Bank’s country director for Brazil.

The World Bank’s preference for brick-and-mortar projects has undermined efforts to improve the performance of Pakistan’s water sector before. In the 1980s, the bank approved four projects to rehabilitate the existing canal system and stem water losses. When the water bureaucracy resisted change and misused the loans for building new canals, the World Bank looked the other way. As an internal evaluation found, “the Bank did not insist on the implementation of the agreed strategy against the pressures of special interests,” and “[its] concern to keep disbursement flowing reinforced this focus. . . . The Bank helped to further this distortion of objectives by making it plain that construction progress was the highest priority.” In Pakistan and elsewhere, the Bank’s self-interests conflict with its own development objectives and will continue to thwart its efforts to fight corruption.

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USG IDB BOARD STATEMENT: PERU—PROPOSAL FOR A LOAN FOR CAMISEA PROJECT  
SEPTEMBER 10, 2003 (ABSTENTION)

The United States is abstaining on IDB financing of the Camisea gas project. We wanted to be able to vote in favor of this project, and went to unprecedented lengths to work with the IDB, the project sponsors, and the Government of Peru to strengthen its environmental and social protections. We greatly appreciate the efforts and patience of IDB management and staff, the project sponsors, and the Government of Peru to work with us to address these risks. We are encouraged by recent actions by the Government of Peru, project sponsors, and the IDB to improve the project. We applaud the government’s commitment to improve the marine reserve area.

The United States strongly supports President Toledo and his goals for increasing Peru’s economic growth and improving the standard of living for Peru’s people. The Camisea project offers profound economic benefits for Peru, forecast to boost Peru’s economic growth by nearly 1 percent per year over its 30-year expected operation. Regardless of our vote, our expectation is that the Camisea project, now 70 percent constructed, will be completed soon, bringing these benefits to the people of Peru.

We look forward to continuing to work with Peru in the sound development of its hydrocarbon industry.

Our decision is based in part on indications that private financing may be available on favorable terms. In addition, unfortunately, the IDB's involvement was constrained because it did not formally apply its environmental policies to the upstream component of the project, and began serious engagement with the downstream sponsors only after the project's design was completed. We are also concerned that tight completion deadlines set by Peru's authorities became a serious obstacle to mitigating environmental risks and encouraged the sponsors to expedite construction, sometimes in advance of receiving government approvals. Finally, we have not been able to allay doubts about the adequacy of the environmental assessment conducted for the project.

Looking ahead, this project highlights the pressing need for the IDB to establish a policy to improve consultation with and address the needs of indigenous peoples. We want to work with the IDB on the application of its environmental oversight to facilities that are closely related to projects being funded.

In closing, I want to reiterate my government's profound gratitude for the hard work done by IDB management and staff, the Government of Peru, and project sponsors to improve the Camisea project. We applaud commitments made and are prepared to help bilaterally with Peru's efforts to improve the quality of the natural environment in Paracas Bay. In fact, the United States is committed to provide roughly \$2 million over the coming 2 years to help with these efforts. We will continue to support wherever possible, well-designed initiatives to increase Peru's economic growth, including in the IDB.

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WORLD BANK—CHAD CAMEROON PIPELINE AND CAPACITY BUILDING PROJECTS—  
UNITED STATES POSITION—BOARD DATE: JUNE 6, 2000

INTRODUCTION

1. For Chad, the potential benefits are huge, but so are the risks. The large prospective inflow of oil revenue over a period of almost two generations represents an unparalleled opportunity for major, enduring progress toward equitable economic development and poverty reduction. It represents a new hope around which to build a cohesive national program for the future. It represents potential funding for the priority social investments on which that future actually rests. And it represents a unique opportunity to introduce some of the instruments and institutions that are integral to responsive and transparent government.

2. Arrayed on the other side are the risks and the hard realities. There is the reality that natural resource extraction in much of the world has, alone, rarely contributed to durable and widely shared social progress. More often than not, it has been a major source of economic distortions and social divisions. There is the reality that major infrastructure projects of this type inherently bring environmental and social disruptions even when approached with maximum care and foresight. There is the reality, and let us be frank, of pervasive and debilitating corruption in both Chad and Cameroon. There also is the reality that those people whose lives will be most directly affected by this project have reason to doubt that their voices will be heard and heeded in the future.

3. Much the same must be said for the Bank: Major opportunities arrayed against major risks. This is an opportunity for the Bank to make a measurable contribution toward meeting its core purpose—sustainable poverty reduction. It is an opportunity to apply rigorously a whole slate of mandated policies by which the Bank now fundamentally defines itself as an institution. And it is an opportunity to set a higher operational standard for the Bank group, for all of its borrowers, for the development community more broadly, and for the private sector.

4. We are all well aware of the risks. The World Bank and other multilateral financial institutions are under acute scrutiny and criticism, some of it fully justified. The results of many years of effort and billions of dollars have fallen well short of aspirations, especially in Africa. And too often this institution has supported operations that do not measure up to either what is possible or to what is required. Especially in the wake of recent project-related problems in the Bank, there is no mystery why this project has the profile it does, nor why it may well represent a defining moment for this organization.

5. For all of these reasons it is incumbent on us to satisfy ourselves that the risks and aspirations, and the project details themselves, have all been carefully, fairly, and thoroughly reviewed. We therefore welcome the extensive dialog we have had with Bank staff and management, with other shareholders, and with a wide variety

of other interested groups. We have benefited greatly from the information we have received from many sources, including all of the supplemental material the Bank has helpfully provided, and have reviewed and weighed all of it with great care and seriousness.

6. The Bank deserves credit for the extensive changes to and improvements in the full range of the pipeline project's core design and monitoring features resulting in large part from questions and concerns raised by both shareholders and outside groups. The pipeline has been substantially rerouted; unprecedented mechanisms have been accepted to monitor and supervise oil revenue flows, and to direct them largely to social investment priorities; firm commitments have been made with respect to public engagement in monitoring work, including regular dissemination of detailed project status information to the public and, the Bank has committed to extensive reporting and additional analysis on all of the major issues of public concern.

7. Public reservations and analysis, and our own, have converged around a few specific issues and concerns that most of us regard as paramount. They are the project's environmental and social elements, the use of future resources produced by the investment and, the provisions for monitoring, reporting, and public participation.

#### ENVIRONMENTAL AND SOCIAL ISSUES

8. We welcome the major improvements made to the project's technical design and siting as a result of the important concerns raised about inadequacies on its original design, particularly the need to minimize disruption of fragile communities and ecosystems. A serious and open-minded examination of alternative designs must be central to the Bank's approach in all circumstances.

9. We also welcome the extra internal efforts we have been assured the Bank has made to guarantee full compliance with all relevant Bank policies. The direct and unambiguous assurances we have personally received on this point gave us the higher level of confidence on this crucial issue that we would welcome in other cases.

10. This said, it is also true that important details remain to be provided in several crucially important areas. The General Oil Spill Response Plan, by design, only provides a broad framework for dealing with the real possibility of a damaging spill. We expect additional detailed information under the general plan to be provided to us and the public within 12 months. Such information should include spill scenarios, equipment specifications, and dedicated budgets. All of this is essential for adequate analysis of the area-specific spill response plans that need to be in place well before first oil. We expect that such additional plans will be completed and released at least 6 months in advance, as stated in the Environmental Management Plan (EMP).

11. The adequacy of funding has been of particular concern in two areas: the indigenous peoples plan, and the offset parks. With respect to funding for offset parks, we have not had, frankly, the kind of clarity and precision we might have expected—either from the Bank or from the project's critics. The latest material from the Bank gets us some way toward satisfaction, but we would all benefit from a detailed progress report in 12 months, especially as regards the size and adequacy of commitments by the Government of Cameroon.

The adequacy of the design and prospective funding for the indigenous peoples plan is a matter of perhaps greater concern. It is clear that there are material social and cultural issues between the two largest affected population groups, and that there is a need for substantially better information and consultation. It may well be that this work confirms the design and funding deficiencies that have been asserted. The Bank needs to ensure that additional work is done, and done right, and that whatever deficiencies may emerge are rectified as a matter of priority. We would like the Bank to provide us with a detailed report within 6 months, and to include further detailed analysis as part of the full project report to the board we are requesting after 12 months.

#### SOUND USE OF OIL REVENUES

12. The Bank deserves great credit for the effort it has put into the central issue of sound management by the Government of Chad of the oil revenues that will begin flowing in a few years. Given the management and governance challenges that clearly exist, together with now much higher public expectations of the Bank, it is fair to say that without these arrangements prospects for this project to garner international support would have been virtually nil.

13. The establishment of the offshore escrow account and the subsidiary accounts for resources specifically earmarked for priority social investments, is an entirely appropriate mechanism given the risks. These are major steps forward toward dealing more effectively with what we all know to be the priority poverty reduction challenges in Chad. We also welcome the Bank's commitment to integrate these arrangements fully into its poverty reduction strategy process for Chad, and to treat both as an inextricably coupled whole. To do any less would be to defeat the aspirations of Chad's poor, and those who are willing to support this project despite its great risks. The preparation and public disclosure of comprehensive and regularly updated public expenditure reviews is essential to the process. We would appreciate assurances that this is indeed the Bank's intention.

14. We regret that the revenue use issues for Cameroon have not been approached with anywhere near an appropriate level of ambition and seriousness. The Bank's recent, and admirably candid, CAS Progress Report should have erased whatever doubt might exist about the capacity and willingness of the government to make the choices and changes essential for any progress against poverty. Corruption is a huge problem. Priority investments are not being made to build the social resources needed for self-sustaining growth and equitable development. Assistance is being poorly used.

15. We fully recognize that the additional resources we are dealing with here are of a different character and order of magnitude. But we also believe that the bank, and therefore we, have missed an opportunity here to do something materially different and materially better than business as usual. At a minimum we would expect the Bank to provide us, and the public, with comprehensive, periodically updated public expenditure reviews for Cameroon, as well. We also expect the Bank to ensure that future lending operations in Cameroon focus aggressively and specifically on these issues.

#### MONITORING, REPORTING, AND PUBLIC PARTICIPATION

16. The Bank is also to be commended for the numerous specific provisions it has built into these projects to increase the amount and quality of monitoring, reporting, and public participation. Many elements might properly become a basic model for the Bank and others. In other respects, however, further refinements and improvements in the currently envisioned arrangements should be pursued. And, of course, it will all be worth little without full and diligent implementation.

17. We welcome the Bank's decision to establish a fully independent International Advisory Group (IAG) to monitor, assess, advise, and report on the full range of issues that will determine this project's success in translating oil revenues into poverty reduction. That said, we are not entirely clear on the form and frequency of the IAG's communications and interactions with the board and the public, nor on the nature of the board's operational relationship with the group. Clarification of these issues would be welcome.

18. The establishment of an External Compliance Monitoring Group (ECMG) is another very positive addition to the array of oversight and monitoring mechanisms employed. We look forward to the opportunity to review the ECMG's Terms of Reference, and would appreciate clarification of the funding arrangements and reporting frequencies presently envisioned. The review process for the Terms of Reference should specifically include the engagement of civil society. Beyond this we fully expect the Bank to exercise its right to make ECMG reports public as a routine matter.

19. The Petroleum Revenue Oversight and Control Committee is another vitally important monitoring and accountability mechanism. It will be imperative to ensure that its role is effective and its structure credible. Adequate membership by individuals not affiliated with the government is essential. So too is regular full reporting to the public. And finally, so too is an operational function that goes beyond simply acting as a conduit for revenues flowing from the external partners. As far as we can tell, however, on none of these key issues is there yet the clarity that we have been seeking for some time.

20. The Bank's necessary engagement in monitoring goes well beyond effective interaction with these various entities. Its own systematic and comprehensive supervision is essential. We are pleased with the commitment to place two fully dedicated staff members on the ground and to allocate additional specialized resources. However, we question whether the provision of supervision resources—equivalent to about \$1 million per year—will be adequate. A rough estimate suggests that this will cover in the range of 4 to 5 staff years, including the dedicated country-based staff. Given the complexity of the monitoring and supervision issues, as well as the Bank's huge ongoing public exposure on this project, we seriously question whether

this is adequate. The fact that the Bank's planned supervision arrangements may go well beyond what is typical offers no particular comfort. All considerations argue strongly that the Bank should err well onto the side of too much rather than too little supervision.

21. We support the participation of Chad and Cameroon in WBI's integrated anticorruption/governance learning program, in collaboration with the Africa region. The participation of both Chad and Cameroon in this program, which combines in-depth diagnostic tools with an action-oriented, highly practical core course program, is constructive and critical, given the serious governance, corruption, and capacity challenges both countries face. As today's project documents illustrate—and the recent Cameroon CAS update note reinforces—both countries will benefit from a program that helps the governments and citizens develop serious action programs based on sound analytical work. We would appreciate confirmation from the Bank today that Chad and Cameroon have agreed to enter this program.

#### CONCLUSION

22. As we said at the outset, we value and appreciate the time and effort the Bank and both countries have invested in this project. We also welcome the institution's and authorities' openness to the views of others and the willingness to make major changes in a project that has been under development in one form or another for over a decade. There is no question that the project is vastly improved, both conceptually and with respect to specific design elements, relative to where it was even 9 months ago.

23. There is also no question that further improvements could and—we would strongly urge—should be made within an overall structure we now regard as basically sound. Specific assurances from Bank management regarding these additional measures would be both appropriate and helpful, and we are prepared to support the project in that context.

24. In conclusion, we would reiterate that every aspect of the Bank's engagement in this project will be under intense scrutiny—from us, from other institutions, and from a deeply skeptical public. The process leading up to today's discussion has not, to its credit, been business as usual. The process going forward absolutely must not be either. The record on implementing this project will directly shape our willingness to support additional Bank assistance for both of these countries going forward and for this type of project more generally. On a broader plane we must expect that it will also unquestionably be a prism through which the world views this institution and, it is likely, development assistance more broadly. The stakes could not be higher.

