PANEL ON ENVIRONMENTAL TRENDS AND GOOD GOVERNANCE

PADILHA VIDAL CONFERENCE ROOM

10:00 AM – 01:00 PM

SEPTEMBER 14, 2006

Sponsored by the Organization of American States

Meeting Report

Agenda

10:00 a.m. **OPENING**

Dr. José Miguel Insulza, Secretary General, Organization of American States

10:15 a.m. **ENVIRONMENTAL TRENDS AND THE MILLENNIUM ECOSYSTEM ASSESSMENT**

- *Panel Moderator*: Dr. Thomas E. Lovejoy, President, H. John Heinz III Center for Science, Economics and the Environment
- Dr. Cristián Samper, Director, National Museum of Natural History, Smithsonian Institution
- Dr. Guillermo Castilleja, Senior Vice President, WWF US

11:20 a.m. **GOVERNANCE, PUBLIC PARTICIPATION AND ENVIRONMENTAL MANAGEMENT**

- Ruth Greenspan Bell, Resident Scholar/Director, Resources for the Future
- Karin M. Krchnak, Director of International Water Policy, The Nature Conservancy
- Daniel B. Magraw, Jr., President, Center for International Environmental Law
- *Commentator:* Charles Di Leva, Chief Counsel, World Bank

12:20 p.m. **DISCUSSION**

13:00 p.m. **CLOSE OF MEETING**

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Environmental Trends and Good Governance

1. Introduction

This panel is part of a series of meetings that the OAS has organized in the preparatory process for the First inter-American Meeting of Ministers and High Level Authorities of Sustainable Development that will be held in Santa Cruz de la Sierra, Bolivia, in December 2006. The OAS Department of Sustainable Development has organized several civil society panels in order to seek the input and the advice of civil society and non-governmental groups as the delegations of the 34 OAS Member States draft the Declaration of Santa Cruz de la Sierra, which will be adopted at the Ministerial Meeting. Thus far, meetings of civil society took place in Argentina and in Bolivia where 240 indigenous groups participated. Similar meetings will also take place in Panama, Trinidad and Tobago, Brazil, and Mexico.

From the OAS perspective, these participatory processes are intended to provide direct input to the 34 OAS Member States in a wide array of cross-cutting themes. These include good governance, meaningful public participation, the inclusion of indigenous communities, and gender equity. The themes will be analyzed in support of sustainable water resources management, natural disasters risk reduction, sustainable agriculture, sustainable forestry and sustainable tourism. Recommendations from governments, NGOs, the private sector and other stakeholders of civil society will be integrated into the Declaration of Santa Cruz de la Sierra.

2. Opening Remarks

Dr. José Miguel Insulza, Secretary General, Organization of American States

The background for this panel discussion is two-fold. First, it is part of the preparatory process towards an OAS Ministerial Meeting on Sustainable Development, to be held in Santa Cruz de Sierra, Bolivia in late 2006.

Coming a decade after the OAS Summit on Sustainable Development held in Santa Cruz, the 2006 Bolivia meeting provides the opportunity to take stock of progress made in the past ten years and to identify new challenges as they arise. More specifically, the ministerial meeting is a chance for the 34 countries of the OAS to define a focused and clear cooperative agenda. Frankly, another general, normative political declaration about environmental priorities is simply not needed. Diplomatic archives are littered with political promises related to the environment that, once carefully crafted and adopted, are quickly forgotten. Rather, the Bolivia meeting offers the opportunity for governments, civil society and the private sector to set out specific, tangible and cooperative measures that make a difference.

The second objective of today's panel is a more general and important one: to underscore the absolute urgency of mainstreaming environmental protection, risk reduction in natural disasters, and sustainable development, within the broader political context of an organization such as the OAS. The mandate of the OAS entails supporting hemispheric cooperation and integration within the context of promoting democracy, human rights, hemispheric security and poverty alleviation through integral development. These are the main planks of our daily work. While democratic institutions remain fragile in many areas, progress continues. And it is here that

environmental degradation will affect the tenacity and fabric of democratic foundations. Democracy cannot be sustained when 140 million people in the hemisphere today lack access to adequate sanitation services. Democracy will not endure when 75 million people lack access to clean drinking water, and over 80 million people in Latin America breath air-pollutant levels that exceed WHO guidelines. The vast majority of those exposed to dirty air and dirty water are also the poorest communities of the region, plagued by generations of injustice and exclusion.

Environmental protection and sustainable development are not regarded as a priority in most organizations or countries. Rather, they remain on the policy periphery —regarded as technical issues, or worse, a luxury to be attained *after* key targets of economic growth are realized. As a former foreign minister, it is clear this perception needs to change. Environmental degradation — together with the increased frequency and severity of climate-related natural disasters— cannot be separated from core developmental priorities.

One of the real contributions of the Millennium Ecosystem Assessment is its linking of robust scientific diagnostic that tracks the scale of environmental destruction, with the economic implications of environmental loss. For instance, the loss of production top-soils, coupled with deforestation and the alarming loss of biological diversity together have profound economic and development implications. Changes in average temperatures and rainfall patterns related to climate change compound soil loss as well as water scarcity, which in turn affects the livelihoods of tens of thousands of farm workers.

By every account, these environment-related human health affects will worsen. We already know that, in 2005, some parts of the wider Amazon river basin suffered its worst drought in 100 years. Many scientists have concluded that the drought caused by record-high temperatures which formed over the mid-Atlantic basin also caused the highest number of hurricanes and tropical storms ever recorded in the Caribbean islands, Central America and along the United States eastern seaboard. One specific impact of the Amazon drought was a record spike in the cases of malaria.

What we are learning, although too slowly, is that environmental instability leads to instability in relations among countries. Therefore, it is important that institutions such as the OAS focus on such core issues as environmental related conflict avoidance, especially in light of the profound changes already underway.

Remarkable progress has been made in the past decade in the area of good governance. This is not surprising. The environmental agenda took shape from the grass-roots activism and demand for accountability and change from community groups and civil society organizations. Based on the foundations civil society has already built, the 2006 ministerial meeting to support and push the governance agenda forward. Three particular priorities are clearly identified. First, there is a need to improve the information available to governments to help them identify environmental problems, understand the consequences of those problems if ignored, and establish a common regional platform upon which to coordinate responses.

Second, the ministerial meeting should advance the manner in which civil society is assured full access to environmental information. Five years ago this week —in fact on September 11, 2001— the 34 OAS member countries endorsed a remarkable document —the *Democratic Charter*— which commits each government to support meaningful public participation and

advance institutional transparency. The Bolivia meeting should build upon these and other commitments, and set out a plan that brings about comparable standards with regards access to environmental information. Finally, the meeting presents the opportunity to advance on-the-ground cooperation in the effective monitoring and enforcement of environmental and conservation laws. In too many instances, environmental destruction is caused not because of gaps in regulations and laws, but rather by weak monitoring and enforcement. One ministerial meeting clearly will not solve all these problems, but it will provide a platform to push for change.

3. Environmental Trends and the Millennium Ecosystem Assessment

a. Introduction by Dr. Thomas E. Lovejoy, President, H. John Heinz III Center for Science, Economics and the Environment

The topic of this meeting may be analyzed in terms of environmental infrastructure, providing not only biological diversity and resources, but also services ranging from local watersheds and supply of clean and reliable water, all the way to the global scales of the carbon cycle and the need for a better management of environmental resources.

The Heinz Center has an ongoing project on environmental indicators known as the State of the Nation's Ecosystems. This project is the United States' most comprehensive report on the condition of lands, waters, and living resources. The report provides essential information to framers of local, state and national environmental policy as well as business leaders and the general public. Its broad nonpartisan support and strong scientific basis allow decision-makers to focus on the best course of action —rather than spending time debating the condition of the nation's environment. The unique strength of this project derives from its focus on ecosystem indicators —agreed upon by hundreds of experts from universities, government agencies, corporations, and environmental organizations— presented without prescriptive recommendations. Funded by the federal government, foundations, and corporations, the report also highlights key gaps in data that must be filled to allow for a complete picture of ecosystem conditions. This project can be considered a worldwide model of national indicator approach. What this panel is intending to do is exactly the same thing, but on a global rather than a national scale.

As most of you know, the great forest of the Amazon basin is not only the world's greatest repository of biological diversity. It also has the very important property of generating half of its own rainfall. Its ability to generate rainfall depends on actually having forest there so that the individual trees will expel moisture after it is rained on them and also provide complex surfaces for evaporation. The unknown question that has been out there since scientists demonstrated this three decades ago is how much deforestation the Amazon system can withstand before that hydrological cycle begins to degrade irreversibly.

In the last thirty years, several other very important things have been learnt. First of all, El Niño event —which some time ago was considered to be a local phenomenon of the coast of Peru, can literally reach around the world and across South America, and cause serious drought in the Amazon basin. To maintain the Amazon's hydrologic system we need to worry about deforestation, El Niño and the ocean driven drought occurring at the same time. The Amazon's

hydrologic system is more fragile than it was understood before. This is coupled with the realization today that at least 40% of the rainfall south of the Amazon, in Brazil and in Northern Argentina originates from the Amazon. Vast agricultural enterprises south of the Amazon and East of the Andes, and all the hydroelectric installations in that part of the world depend very much on moisture originated from the Amazon's hydrological cycle.

The issue before the eight nations involved in the Amazon is actually how to maintain it as a functional system. The most difficult question is how to generate the political will in order to achieve it. According to Dr. Lovejoy, the answer lies in financial flows from Carbon payments for avoided deforestation. This could be accomplished under any current mechanisms or under a special mechanism set up within the framework of the Amazon Cooperation Treaty Organization. There are very large problems, but also some very special opportunities, concluded Dr. Lovejoy.

b. Millennium Ecosystem Assessment: Implications for the Americas. Dr. Cristián Samper, Director, National Museum of Natural History, Smithsonian Institution

We start from the premise that we recognize that the ecosystems of the world provide a whole range of services that we, as humans, rely on. Some of the most obvious ones are direct benefits such as food provision from agriculture, fisheries or other elements. However, there are numerous other ways that we derive benefits from ecosystems, including nutrient production, cycling and many others. The Millennium Ecosystem Assessment tries to assess all kinds of services, not only the ones that go through markets or those that are direct, and how their interactions are changing with other drivers.

The central question of the Millennium Ecosystem Assessment asks what are the conditions and trends in ecosystems and the services they provide, and the consequences for human well-being.

We identified that ecosystem services fall into four broad categories: provisioning (food, freshwater, wood and fiber, fuel, etc.), regulating (climate regulation, food regulation, disease regulation, water purification, etc.), supporting (nutrient cycling, soil formation, primary production, etc.), and cultural (aesthetic, spiritual, educational, recreational, etc.). These cultural services are the hardest to get a handle on and are the most important for local communities.

We set up a conceptual framework where we recognized that behind the changes there are a number of direct drivers and indirect drivers of change, and that all of those changes are affecting both the ecosystems and human well-being. Just to give some examples, direct drivers are issues such as habitat transformation, changes in land use, species introduction or removal, technology adaptation and use, external inputs (e.g., irrigation), resource consumption, climate change, natural physical and biological drivers (e.g., volcanoes), etc. These direct drivers lead to ecosystem change and extinction. Behind those direct drivers there is a whole set of indirect drivers related to demographics, economics (globalization, trade, market and policy framework), socio-politics (governance and institutional framework), science and technology, culture and religion, and all of those elements that are driving issues such as deforestation, invasive species, etc.

It is really important to make the distinction between direct and indirect drivers of change because most of our policies are targeting indirect drivers. However, it is important to understand

how those relate to the direct changes that are affecting ecosystems and their services. And those changes affect many dimensions of human well-being such as basic material for a good life, health, good social relations, security, freedom of choice and action.

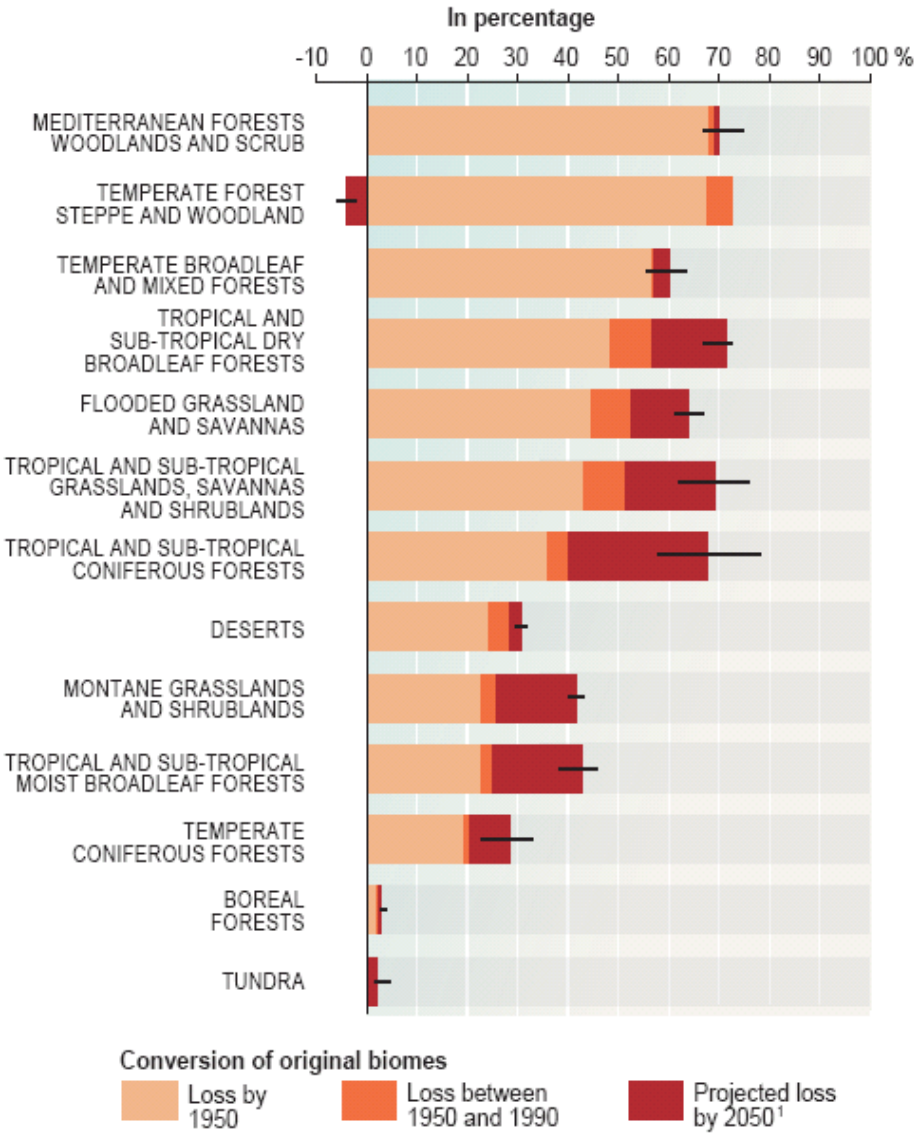
The Millennium Ecosystem Assessment was prepared by 1360 experts from 95 countries, an 80-person independent board of review editors and the review and comments from 850 experts and governments. The purpose was to gather scientifically valid existing information. No new information was generated. The assessment was called for by the UN Secretary General in 2000. The Millennium Ecosystem Assessment was structured by having four main working groups:

Condition and Trends	Scenarios	Responses
- What are the current condition and historical trends of ecosystems and their services? - What have been the consequences of changes in ecosystems for human well-being?	- Given plausible changes in primary drivers, what will be the consequences for ecosystems, their services, and human well-being?	- What can we do to enhance well-being and conserve ecosystems?
Sub-Global	- All of the above, at regional, national, local scales	

We tried to make sure that the information was relevant for policies but not prescribing outcomes. The Millennium Ecosystem Assessment does not set policies but rather gives the tools to decision-makers to make them.

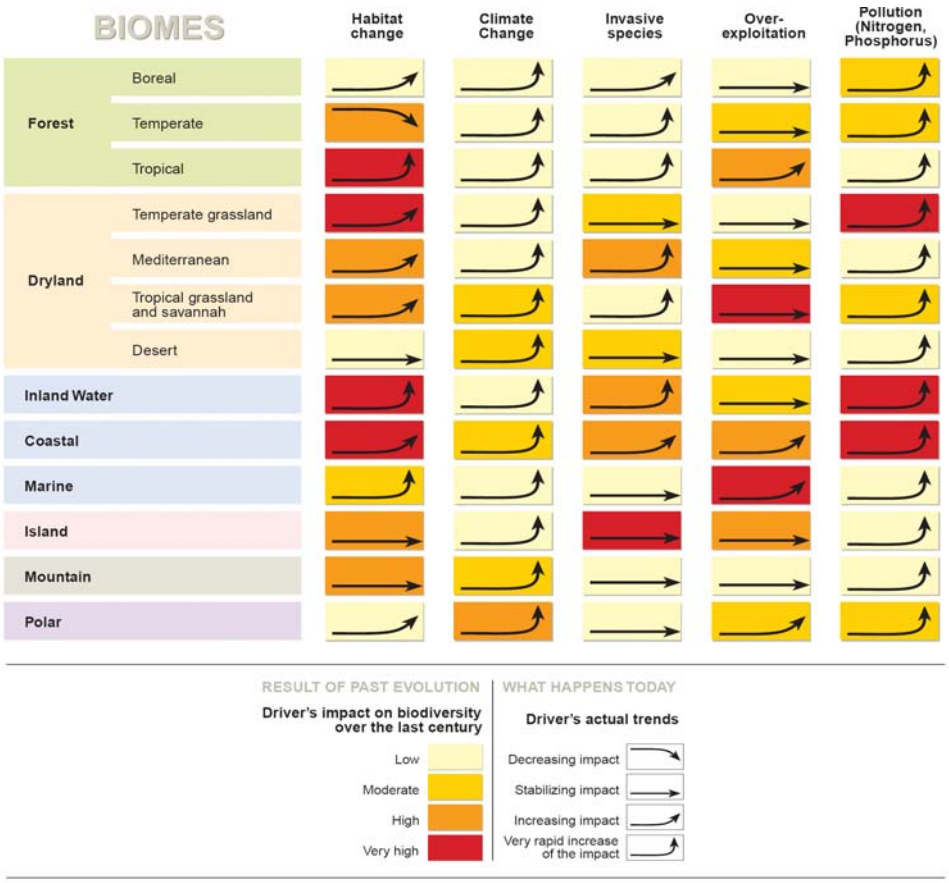
The first finding is that, over the past 50 years, humans have changed ecosystems more rapidly and extensively than in any other comparable period of time in human history. This has resulted in a substantial and largely irreversible loss in the diversity of life on Earth. In quantifiable terms, in the last 50 years a total of about 25% of the entire terrestrial surface of the planet has been changed. Those changes are having major consequences in terms of the diversity of life in the planet.

The graph below describes the main biomes of the planet and their rates of change. Temperate and Mediterranean forests are the areas that have been hit the hardest in the last 200 years. The projections of change for the next fifty years are shown in red.



The second most important finding is that the changes that have been made to ecosystems have contributed to substantial net gains in human well-being and economic development, but these gains have been achieved at growing costs. These problems will substantially diminish the benefits that future generations obtain from ecosystems. For example, between 1960 and 2000 the population of the world increased from three billion to six billion people. In other words, the population doubled in 40 years. During those same 40 years, agriculture productivity worldwide increased two and a half times. Therefore, agriculture productivity is actually increasing faster than population growth on a worldwide average. However, the trade-off is that, while most human activities have focused on the provision of services for agriculture, the other environmental services have been affected negatively. After having assessed 50 environmental services, it was realized that only two of them had actually improved in the last 40 years, the remaining 48 actually declined.

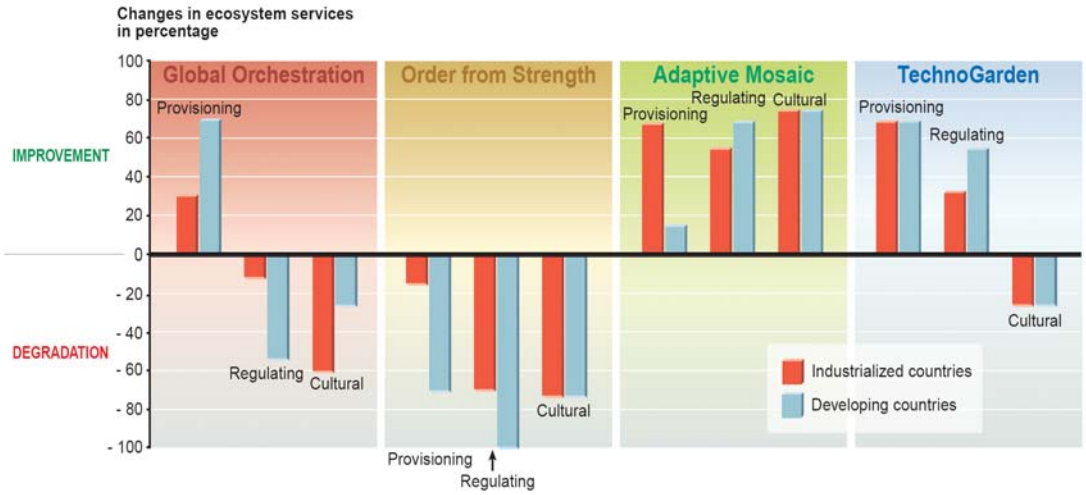
The third major finding is that the degradation of ecosystem services could grow significantly worse during the first half of this century. This is a barrier to achieving the Millennium Development Goals. The graph below displays the trends in terms of direct drivers growing in intensity. The matrix compares the types of ecosystems with the drivers and identifies which are the main drivers for each type of ecosystem. Wherever the graphic displays a red rectangle, it is pointing out the main driver for that particular ecosystem. The arrows summarize the trends that have been noticed. Only one arrow is going down —the forest cover in temperate areas. This is related to reforestation in areas like North America.



The fourth finding is that many options exist to conserve or enhance specific ecosystem services in ways that reduce negative trade-offs or that provide positive synergies with other ecosystem services.

As the graph below shows, four kinds of scenarios were developed as part of the Millennium Ecosystem Assessment. These were dubbed as four kinds of future scenarios of improvements in services that can be achieved by 2050. They prove that there are many response options in our hands. The Global Orchestration scenario is composed of multi-lateral institutions such as the OAS, UN, World Bank, etc. The conclusion was that these would be very efficient at provisioning services, but will not be able to deal with issues such as cultural services. The Order from Strength scenario basically consists in focusing on one's in-country and defending national

borders. The outlook is overall negative in this scenario. The Adaptive Mosaic scenario is focused on developing cultural and environmental production practices relevant to each context, recognizing that the Americas is a collage of cultures, ecosystems and others, and identifying cultural and technological practices that are relevant. This was the most promising scenario. Lastly is the TechnoGarden scenario, which focuses on technology. The conclusion for this scenario was that technology is very good for provisioning and regulating services, but does not solve the challenges relating to cultural services.



The fifth finding is that the scale of analysis has an important effect on assessment results, and the relative importance of services varies with scale. The use of different knowledge systems can provide useful insights that might otherwise be missed, and is most important at local scales. Therefore, the scale of the analysis is crucial in terms of coming up with the right findings.

One of the innovations of the Millennium Ecosystem Assessment is that, although global assessments were made, many sub-global studies were also made. Every one of them was lead by national institutions. A total of 33 studies are currently under way as part of the Millennium Ecosystem Assessment. For example, sub-global studies in Southern Africa show that the areas where the biggest potential conflicts exist in terms of the use of ecosystem services and the impact on human well-being are the areas where social and political conflicts are currently happening. These conclusions could also be reached with regards to Latin America. Therefore, it is important to do studies in multiple scales to highlight the importance of ecological and social processes in different scales.

Some findings were made with regard to sub-global studies. First of all, the response options are very different from one region to another, one country to another or one community to another. It was also realized that ecosystem services are important for many dimensions of human well-being, some of which are best observed at local scales. Everywhere cultural services grow increasingly important as the scale of the analysis is increased. Local communities care a lot more about cultural practices and aesthetic values than just the provision of services. Therefore, whereas the global assessment is dominated by food productivity, the local assessments are dominated by issues such as cultural and spiritual values of diversity.

Secondly, the scale of analysis may change the conclusions. Digging in with scales will provide better conclusions for environmental realities. Thirdly, we know that different drivers operate at a different scale. Whereas issues like global change and climate change will affect every scale, the overexploitation of resources tends to operate at local and regional scales. Understanding the scale of analysis is fundamental. Lastly, using different knowledge systems and involving local communities provides useful insights that might otherwise be missed.

In conclusion, we have identified five types of response options that we can deal with right now. The first one has to deal with institutions. In every case analyzed, there is no doubt that having strong institutions that are accountable and transparent is fundamental for good ecosystem management. The second type of response has to do with the economic responses. Some of the subsidies in place (e.g., agricultural and fisheries subsidies) should be eliminated. These subsidies make very little sense and have major impacts. Markets for ecosystem services should be developed (e.g., bio-trade, climate change, certified wood, etc.). The third type of response option has to do with technology. There are a lot of technologies ready and available right now that could be transferred to the countries throughout the Americas. This can play a major role in clean production, information technologies, etc. The fourth issue has to do with social and behavioral changes and attitudes. This relates to education, awareness, and to making sure that ecosystems and services become embedded in all of our practices as a society. The last type of response option has to do with knowledge. There is a lot of information available. The Millennium Ecosystem Assessment summarizes tens of thousands of articles and publications into 2,000 pages. This could also be done for each one of the countries of the Americas. The OAS could play an important role in this task.

The OAS could use this conceptual framework to analyze tradeoffs for ecosystem services. It could promote the adoption of some of these response options (markets for ecosystem services, technology transfer, institutional capacity, information, and support of national and regional assessments). Finally, the OAS could support and encourage the development of national and regional assessments in Latin America. Good policy has to be based on good science.

c. The Amazon Region Protected Areas Program – ARPA. Dr. Guillermo Castilleja, Senior Vice President, WWF United States

As stated in the Millennium Ecosystem Assessment and confirmed year after year by the Food and Agriculture Organization, the world looses its forest cover at a rate of about 13 million hectares per year. This area is roughly the equivalent of the size of Nicaragua. Most of this deforestation occurs at the tropics, particularly within the Amazon basin. This basin includes eight countries. It encompasses an area the size of Western Europe, is the greatest repository of biological diversity in the planet, and produces approximately one fifth of the planet's freshwater. Almost 25% of the annual forest loss occurs in this basin. It is estimated that about 16-18% of the original forest cover of the Amazon basin has been lost. It continues to disappear at a rate of 2-2.5 million hectares per year. The economic and social implications of this deforestation process are truly dramatic.

The Brazilian government monitors deforestation within the Amazon Basin very carefully. One of its top priorities is to curb the rate of deforestation. Important policies have been implemented to address the issue. One of the key policy instruments is protected areas.

The Amazon Region Protected Areas Programme (ARPA) focuses on the Brazilian part of the Amazon biome. This partnership comprises key groups ranging from government agencies to NGOs representing civil society and local communities, to major donors. The partnership grew out of a pledge made by the Government of Brazil in 1998 to triple the area of the Amazon under legal protection. Since the program's start up in 2003, it has set world-class standards for innovation and cooperation involving multiple sectors of society and has produced extraordinary conservation results ahead of schedule. By investing in the sound management of biologically important state and federal lands, ARPA is playing a key role in ensuring that future development in the vital Amazon region can take place on a solid environmental footing.

ARPA's objectives are:

- Create and establish 28.5 million hectares of new federal and state parks in the most biologically important areas.

- Create and establish 9 million hectares for sustainable extractive use reserves in which local communities have a stake in managing natural resources and conserving the rainforest.

- Transform 12.5 million hectares of critical but neglected "paper" parks existing prior to ARPA's inception into well-managed conservation areas.

- Set up a state-of-the-art Protected Areas Trust Fund to ensure long-term financial viability and integrity of the park system.

In ten years, Brazil will create a national protected areas system encompassing a total of 50 million hectares, which is roughly the size of the US national park system, which took more than 100 years to be created.

Three key lessons should be taken into account in order to implement a plan as ambitious as this one. These apply to other parts of the world and not just to the Brazilian Amazon:

1. This endeavor cannot be carried out by one single institution. Such a monumental task has to be implemented through innovative public-private partnerships. The key issue is to develop the kind of governance that is needed to promote participation at all levels, starting at the communities on the ground that will benefit from the protected areas, all the way up to the large financial institutions that will help governments carry out these objectives.

2. It has to be science based. When we think about a protected areas system, we need to understand what the objectives that we are trying to promote are. One of them is going to be the protection of biodiversity. A blueprint for conservation that decision-makers can use as they go about deciding where to establish protected areas should be created based on credible, reliable science. This is a very important tool.

3. Protected areas need to respond to the reality of deforestation. In the case of the ARPA initiative, the number of protected areas was doubled. Many protected areas are lined-up

along the arch of deforestation. Many of the parks, protected areas and extractive reserves that have been established contain the deforestation front.

ARPA has proved to be successful thus far. The leadership of the Brazilian government and the support of other institutions are critical. The question is what impact is this having on deforestation and what the relationships are among parks, protected areas, extractive reserves and deforestation. First of all, deforestation is fueled by roads. This is a well settled principle and the experience of ARPA in Brazil shows it. Secondly, it has become clear that protected areas are containing deforestation. One of the reasons for this is that protected areas provide certainty to the land tenure of public lands. In other words, once an area is designated a park or an indigenous reserve, it is less vulnerable to be grabbed by speculators who will burn the land and then try to get title from some government agency to then sell the land. Once the land is designated as a protected area by the government, it helps avoid this particular type of problem. This is a very important fact that applies to many other countries.

Protected areas by themselves are not the solution. Certainty of land tenure is essential to contain deforestation. A landscape approach combining land uses in which local communities can benefit from protected areas and participate in the governance structure through participatory processes is functional. The rights of the local communities must be secured and not be put in jeopardy. The construction of sustainable landscapes is ultimately the way to go. This relates to the governance of these landscapes as well, not just the land use planning that goes with it. How these landscapes are governed is crucial.

This is going to be an important issue as the countries of the Americas step up their efforts to develop infrastructure. There is a real deficit in infrastructure roads, telecommunications, ports, etc. in the region and there is going to be an increased investment in this field. As this happens, it is very important that decision-makers, through participatory processes, tackle the issue of protected areas and other innovative methodologies. Landscape governance that potentially combines different land uses should also be implemented so as to address deforestation which, if unchecked, will occur as a result of increased infrastructure development.

4. Governance, Public Participation and Environmental Management

a. Governance in the Context of Environmental Control and Management. Ruth Greenspan Bell, Resident Scholar/Director, Resources for the Future

Information is the core of developing good governance skills for environmental protection. There is a need to think of governance in the context of environmental control. There is a huge disconnect between laws in the books and their application. For example, China is a country that has never been managed by laws in its 3,000 years of history. Now it has environmental laws that do not look so bad on paper. However, these newly drafted laws are not solving the problem. Pollution is getting worse and China is paying for this with a lot of civil unrest. People in rural areas are very upset with the current situation. A lot of other countries look for some sort of magic formula to deal with this problem.

Governments have the main responsibility for controlling pollution. No one else can afford to build the expensive wastewater treatment plants that are necessary, to write discharge permits and to perform the primary enforcement actions that make laws work. But it is also clear that governments cannot do everything on their own and by themselves. Pollution comes from just too many sources for the government to keep track of it all. It comes from farms, private gardens, bad disposal habits, etc. More than just technical skills are necessary to tackle this problem.

People design, install and maintain technologies. But people can also subvert technologies, and in many cases quite easily. In China for example, many new facilities are built as turn-key operations with the most advanced of environmental protection equipments built-in. When these facilities are turned over from managers, the operators try to save money on the running costs, or they run the pollution control equipment during the day, not at night, or they just turn it on when an inspector visits the facility. Therefore, technology is not the answer. In many cases, a government has the best of intentions and then along comes an election or some other crisis and the environmental program is put on the shelf. This is where the public and concepts of civil society and effective governance skills really come in play and become important.

Effective environmental protection is a very complex and often uneasy partnership between the government, the industry sector and the public. We know that each of these actors comes at this issue from very different angles and positions, and often they may be at odds with each other on these issues. One key to the whole issue is information. With information of good quality citizens can understand the consequences of pollution for their own lives and for their children's lives. With information they can change their behaviors. Ordinary people can improve government decision-making by providing practical information to government regulators about the impacts of pollution and enforcement targets.

With information, ordinary people can also monitor what their governments are doing and what they are not doing. As an example, in the Philippines a network has been set up where people use their cell phones to report buses that are in clear violation of exhaust rules. In some cases this is reported to media because the government often does not do anything. There is a citizen effort to focus on a commitment that the government is not enforcing. Informed citizens are of great assistance to government regulators. A government will benefit when it shares information and reaches out to find out what people think about its proposed actions.

When environmental organizations sue the government for failing to carry out its legal responsibilities, in the end those law suits help the government to focus its work and remind it who it is working for. Furthermore, these law suits are necessary to keep environment on the radar screen. When draft regulations are issued by the government and the public comments on them, regulations are much stronger as a result of that interaction. The public and the regulated community are also more willing to obey these rules because they understand the process by which they are made and have input into the process. In conclusion, information is the core of developing good governance skills for environmental protection.

Many countries these days have made formal commitments to share information with individuals, stakeholders, NGOs, and the public in general. But even countries with good intentions often do not know how to carry out these commitments. They do not know how to share information with the public and they do not have experience with this kind of tasks. In recent years a number of projects have built these skills and good practices for information access. The goal is to

strengthen the skills of government officials so that they know how to bring information to the people. Government officials should be equipped to deal with requests of information made by the public. Structures and practical procedures (e.g., manuals and desk books on how to manage information requests, response timeframes, etc.) should be put in place to make information practices a reality. Plain language guides can help citizens understand how to ask for information and data and what to do if their request is denied. People should feel that their views are at least being considered when the government drafts laws, and that government benefits from interacting on those regulations and laws. Telling people what regulations government is considering is crucial because very often the public can add incredibly valuable insights that will help the regulation be much more effective. In the end our focus should be set on cleaner rivers, breathable air, and reducing the amount of carbons that we send to the atmosphere. This can only happen if we all take personal responsibility for our part in it. This includes all sectors of government and society.

One question is how much participation is desirable. This question should be read as a deeper issue relating to democracy and how it functions. Participation is about making sure there are ways for the public to express their views. It is not about deciding who is to be heard. We should not confuse participation with decision-making and voting.

The dividend of building participatory processes is that at the same time we reinforce democratic principles. If we work hard we can end up with a cleaner environment and also a better society.

b. Governance in the Water Sector. Karin M. Krchnak, Director of International Water Policy, The Nature Conservancy

Governance is something that is already present in all sectors of society. It covers the manner in which power is balanced in the administration of a country and embraces the traditions and institutions by which authority is exercised. What we need to do is to focus our efforts on how to improve governance.

Traditionally, governance was something led by the state. However, the concept of governance has evolved over the last few decades after the war, towards market-led governance. All of the social issues that need to be addressed cannot be addressed by governments alone. What we found in moving toward a market-led system is also that markets cannot address societal problems on their own either. What we are moving towards now is distributed or contemporary governance, where society coordinates and manages itself. This form of governance involves citizens in the process and implies the creation of partnerships among different groups to try to improve sustainable development.

The difficulty that people have with partnerships is that these are voluntary. There are no command and control structures and one cannot make people *do* something. Although this is true, partnerships are also a process where rules are set up among the partners on how people are going to work together to achieve a goal (e.g., sustainable development). Through this process a government system is developed among partners in terms of what to expect from each of the partners and what each partner will be held accountable for.

Water Governance refers to the range of political, social, economic and administrative systems that are in place to develop and manage water resources and the delivery of water services at different levels of society. Water is a very complex topic. However, when we look at the issue of water governance, what is actually intended is a vision for where do we want water resources management to go and what the planning and managing stages to implement that vision will be. This process does not involve governments only, but also all the stakeholders involved. When a country has poor governance, it is more at risk of instability. On the other hand, more participation produces better results. Therefore, getting the governance right is really essential to getting good returns.

Poor governance causes a range of health and pollution problems, lack of access to water and sanitation, natural disasters, inefficient water use, poor access to safe water and sanitation, etc. It is critical to have access to information to make decisions. It is important that this information be credible and scientific. Participation, not just consultation, is fundamental. Access to justice is essential as a way to hold authorities accountable for when they do not act properly. We do this in order to have more equitable decisions, environmentally sustainable and actually implemented. In terms of water governance, we see from projects that, when citizens are involved, when they participate, when there are systems of accountability, projects are actually better and policies are implemented.

In this framework, NGOs do more than bringing law suits. In terms of water management, there are many ways in which NGOs can actually help in the process of moving towards sustainable development. At the watershed level, NGOs can be involved in land acquisition and legal tenure, patrolling of protected areas, erosion control, water source protection, formation of watershed committees, environmental education, promotion of best management practices for agriculture, community development, monitoring and evaluation of project results, etc.

We have been moving towards the notion of integrated water resources management (IWRM). At the World Summit held in Johannesburg, every country agreed to develop IWRM plans by 2005. Although that year has passed us, a recent survey found that about three quarters of the countries around the world are either starting, in the process of establishing, or completing these IWRM plans. We are moving towards a more holistic approach toward water management. Traditionally, water management has been very focused on just the water. However, to achieve sustainable development we need to involve other groups such as the agriculture, energy, infrastructure and finance communities and so forth. Major challenges still faced are the need for ordinances to address long-term sustainability as well as to build a sense of water as a shared good.

Regarding the IWRM process, one of the roles that NGOs have been playing is actually being involved in those planning processes. For instance, in El Salvador NGOs support the reform of the institutional framework as a precondition for the development of a national IWRM plan. In Indonesia they assisted in building on the new water law. In Southern Africa NGOs facilitate and coordinate the processes. In Eastern Africa the focus of NGOs is set on helping in the establishment of inter-linkages or political entities, such as Nile Basin Initiative and the African Ministers' Council on Water (AMCOW) to actually help look about how to move toward integrated water management. Throughout these processes that NGOs have been involved in, it is important that we keep in mind who is responsible for what so that we have clarity on who is accountable for which decisions. This process focuses on how to reduce corruption and criminal activity.

As an example of what an NGO can do, for more than eight years The Nature Conservancy has been involved in a project in Ecuador called the Condor Bioreserve. This biosphere reserve provides water to millions and refuge to the endangered namesake —the Andean condor, national symbol of Ecuador— from the Andes to the Amazon Basin. It is made up of several protected areas and comprises over one million hectares. The high plateaus of the Andean mountain range in the Condor Bioreserve provide 4.5 million gallons of water per month to the city of Quito. What was done through this process was to look at what are the threats and impacts to this area. Identified threats include the advance of the agricultural frontier causing the loss of forest cover, inappropriate agricultural practices causing the degradation of rivers, poorly planned infrastructure projects (28 new infrastructure projects are being proposed), and the population of the Condor Bioreserve area doubling by 2025. In this context, over 50% of water is lost due to inefficient water management infrastructure and pipe systems. The Nature Conservancy focused on improving the efficiency of those systems to capture the water that was being lost. These threats have significant impacts which include the decrease in dry season flow, the reduction of water quality and the withdrawal of waters from 28 rivers in the Amazon Basin. What The Nature Conservancy did was to bring groups together in order to analyze how to protect the Condor Bioreserve and hence the source of freshwater for the city of Quito. It worked with the municipality of Quito, the electric and water utilities, the private sector and other NGOs to create the Fondo para la Conservación del Agua (FONAG). The Water Conservation Fund has focused on setting up a fee system which, in essence, constitutes a movement towards payment for environmental services. The Condor Bioreserve truly provides a service to the people of Quito and its businesses. The fees collected are used toward protection and restoration of this biosphere reserve. In 2006, the FONAG has an estimated equity of about US$ 4,000,000. What was done here was to create a new institution by bringing stakeholders together to help improve water governance and water resources management in order to supply the city of Quito with much needed water. In this process, an important finding was that a city ordinance may be needed in order to ensure the long term sustainability of this type of initiative. In a democracy, political administrations change regularly and if no adequate legal framework is set, then it will be necessary to keep coming back to the government. In the case of FONAG, an 80-years contract was signed with the city of Quito in order to make sure that the project could be implemented in the long-term. Other challenges encountered during the implementation of Quito's Water Conservation Fund included strengthening the capacity of FONAG, creating the culture of IWRM, building sense of shared ownership, managing expectations, educating the public, and producing monitoring data on flows and quality.

In general terms of governance improvement, some important issues should be considered at the inter-American Meeting of Ministers and High Level Authorities of Sustainable Development. One possibility is the establishment of inter-ministerial committees on ecosystem security. This can be a way to break down institutional barriers. This is an excellent mechanism for issues relating to water because good IWRM involves the dialogue among ministries of agriculture, finance, etc. Other possibilities also include building governmental networks around ecosystem issues —recognizing that these are very much economic issues, reviewing and modify enabling frameworks to facilitate integrated resource management, and strengthening monitoring and enforcement systems.

Political will is key for any process that endeavors to improve governance. Good governance processes are lengthy and require long-term commitment, consistent leadership and funding.

Leadership must not be display only in the government, but across all stakeholders, the NGO community and the private sector. There is also no single method or approach to water governance and no 'quick fix'. Solutions that were successful in one place may not necessarily work as well elsewhere if the context is not duly taken into account and ideas are not adapted to different realities. Inter-institutional collaboration necessary, changes in political administrations should be taken into account —seek longer term solutions, participation and consultation are essential for social cohesion, and major water users and regulators should always be involved in any proposed solution. It should also be noted that governments and municipalities must take into account wider governance issues such as international agreements. A lot of work remains to be done in terms of transforming what is adopted at the global level down to the local level.

An important aspect of participation to take into account is gender. Gender is often misunderstood as women's issues. Gender is really about the role of men and women in decision making processes. It varies geographically across regions, cultures, etc. Gender is socially constructed and institutionally constructed and changes over time. Gender mainstreaming is the process of determining the implications for women and men of any planned action, including legislation, policies and programs in all areas and at all levels.

In conclusion, we are in a trajectory toward more holistic and integrative water resources management. We have a long way to go. The Bolivia Ministerial Meeting will be important to look at water issues. Although many parts of Latin America are very rich in water resources, there still is lack of access to water resources and there are problems with invasive species. The role of men and women in these processes is also very important to look at.

It is crucial that Non-Governmental Organizations be able to sit at the negotiating table and work hand in hand with the government in order achieve sustainable solutions.

c. Prior Informed Consent, Good Governance in Water and Democracy Deficit in International Trade. Daniel B. Magraw, Jr., President, Center for International Environmental Law

The true infrastructure of society is the environment and the challenge to address is how to integrate it into our economic, social and national security policies. Individuals and communities which are dependent on natural resources for their livelihoods have the procedural right to participate in decisions about those natural resources, as well as substantive rights in them. We have been looking at the prior informed consent issue across the board. Everyone recognizes that, when creating protected areas, it is important to take into account the people who live in these areas. These people should be allowed to express their interests and be involved in the creation of protected areas. This will allow protected areas to better function. The issue is how does one approach these communities? We may not have a clear answer to this question, but there are some existing mechanisms to look at, including the access and benefit sharing provisions in the Convention on Biological Diversity and the consultation requirements in the Kyoto Protocol.

Another question has to do with good governance and water. I would like to focus on corruption in water resources management. There are many very explicit problems with respect to water and corruption. That is to say that countries and societies have different views of what corruption is.

But the issue of corruption has to be approached in a nuanced way and the responses to corruption also have to be nuanced.

Corruption has to be approached in a comprehensive way. There is a saying that it takes two to tango. But it really takes four to bribe successfully. There usually is a person who is the briber, a government official who is the bribed, the government of that official tolerating the bribery, and the government of whomever the briber is a national of, tolerating it. Therefore, corruption has to be approached at all those levels. There is now a set of international treaties dealing with bribery, including the inter-American Convention against Corruption. The OAS can take a role in continuing to facilitate the implementation of this Convention. This brings us to the very serious governance problem that exists with respect to the settlement of trade and investment disputes.

Economic globalization has led to a vast increase in the number of trade agreements, investment agreements, and intellectual property agreements, each of which contains different disciplines and binding international rules that apply to governments. Some of those affect governments' abilities to protect health, the environment, or public safety in various serious ways. There has also been a vast increase in dispute settlement institutions and processes. That has lead to a vast increase in the number of disputes about governments' behavior vis-à-vis the disciplines contemplated in these agreements. There has also been a shift in authority and legal rights from state governments to private persons, primarily business interests. This is most noticeable in the investment context, where private investors are now given the legal right to bring arbitrations against governments on a vast scale. This occurs both through some free trade agreements and also through approximately 2,000 Bilateral Investment Agreements (BITs) that now exist in the world. These disputes typically involve very important public policy interests. First, they allege wrongdoing of a state. Maybe it is just economic or environmental policy wrongdoing, but in each instance there is that kind of allegation. Secondly, they can involve very large potential financial liability in the part of the state. For example, there are now 37 arbitration cases against Argentina, arising out of its response to its fiscal crisis, which allege billions of dollars of damage. Third, the nature of the legal issues at stake penetrates very deeply into sovereignty and public policies usually regulated by the states. For example the drinking water supply in Cochabamba, California's ban on a polluting gasoline additive, Argentina's response to its fiscal crisis, Canada's ban on the export of Polychlorinated Biphenyls (PCBs), a Mexico town's refusal to grant a permit for a hazardous waste site, a Mexican tax on high fructose corn syrup, Chile's system of allocating fish licenses, and so on.

These are very basic public policy issues that the public should know about and have the ability to be involved in. As a matter fact, the public *would* be involved if these cases were tried in public courts or in a domestic dialogue. But if these cases are decided before arbitration courts, what we see is that transparency and the ability to participate publicly essentially disappears. That situation is exacerbated because of the nature of the disciplines that are being applied. Some of them are very imprecise and require a lot of judgment. There are typically three people in arbitration panels. There is also a very small group of arbitrators and they move back and forth between being arbitrators and being the counsel for private and public parties before those arbitration courts.

The problems with transparency are that, under some of these systems, it is not possible to know that an arbitration process is going on, what issues are alleged, what arguments are made either orally or in writing, what the procedural or jurisdictional rulings are or what the final outcome is.

Even if it is found out what the issues are, it is often very hard for the public to file an *Amicus Curiae* brief —allowed in most of the courts of the Americas. And when the public is allowed to do that, it is asked to justify its interest in the case without access to the case file. All this would not be tolerated in any judicial system with the possible exception of national security issues. In other words what we have here is a real democracy deficit.

First of all, countries can try to reform the rules of the arbitral institutions and processes. One of those processes is going on right now under the United Nations Commission on Trade Law (UNCITRAL). Countries can also try to ensure that the free trade agreements and the bilateral investment agreements that are being negotiated include clauses on transparency, public participation and accountability. A second possibility is that which the parties to the NAFTA have implemented. They have all agreed to publish their briefs, they have allowed having open hearings at the World Bank by closed-circuit TV, they have allowed *Amicus Curiae* briefs, etc. A third option is on a case by case basis. With the help of the OAS, the countries could step in and open up the process. In conclusion, many things can be done. It is up to the countries to decide the course of action.

d. Commentator: Charles Di Leva, Chief Counsel, World Bank

There is a necessity to connect the financial side with the environmental side to change the way finance ministers think of environmental conservation. Infant mortality and corruption have a clear connection. Per capita income and good regulatory practices are also linked. There is a clear increase in per capita income where there are good regulations. Literacy is higher where there is a good governance system. Where there is transparency and accountability per capita incomes are also higher. There is also a clear link between environmental degradation and governance, thus in this case there is insufficient data. The question we must answer is how to strengthen this link. Policy makers should dedicate more resources to the environment.

On the forestry side there is a clear connection on this issue. There are statistics in Latin America that approximately 80% of forestry in Bolivia and Peru has been lost to illegal logging. The ministerial meeting should make some efforts with regard to this particular issue. The fisheries sector is also important to the region. Two hundred million people depend on fisheries, and over 20% of the world's 38 million full-time fishers earn less than US$1 per day. Some 25% of the marine fish stocks are overexploited and 50% are fully exploited and 2.5 million tons of fish are caught off West Africa with gross value of US$1.3 billion, of which about 18% goes to illegal or "pirate vessels."

In China, 8% of the gross domestic product is lost to environmental damage. However, at the state environmental planning budgetary commission only 1.2% of the budget is allocated to address that damage. So again, the case for support of environmental damage is not being made at the financial level.

We see today the relationship between environmental degradation and conflict. However, we still do not know which one comes first. Post-conflict countries often suffer damaged infrastructure and weakened governing institutions, which lead to further damage to environmental capital. See the case of Cambodia, where 30 years after the Vietnam War 30% of the forest cover was lost. Unexploded ordinances still prevent access to natural resources because poor farmers cannot farm

their land because there is an estimated 6 million land mines still preventing access to much of that land. In Rwanda, after the conflict approximately half of the forested area has been lost. Mammal population decreased by 30%. In Sudan an area equivalent to the size of Western Europe has been denuded of cover as a result of conflict. Seventeen million hectares of rain-fed arable land, half of the total usable land, have lost topsoil. Crop yields are at 30% of previous levels in some areas of rain-fed agriculture.

How do we address these various issues? The World Bank finances over US$300 million in forest law enforcement and governance activities (supporting the Ministerial Forest Law Enforcement and Governance). The World Bank has also established a new Global Program on Fisheries (PROFISH). A Country Assistance Strategy (CAS) consideration to the implications of corruption and weak governance on the overall objective of poverty reduction.

However, the country assistance strategies must introduce the environment. It is important to the environmental community to be able to introduce the relationship of environmental damage into this broader dialogue.

The issue is whether it is realistic to push for governance *per se* or should we be focusing on the voluntary side that the private sector will be asked to carry out. This is a tremendous challenge which poses an interesting debate. Allocation of resources and a clear struggle to make environment a larger share of those resources is the main challenge.

5. Recommendations Made by the Participants

i. To strengthen the links between finance and sustainable development through existing collective actions and processes such as the OECD committee to harmonize policies, the UN Commission on Sustainable Development and the OAS existing platform, among others.

ii. To incorporate the private sector into the Bolivia Ministerial Preparatory Process and OAS work in the area of sustainable development, given the link between good governance, good investment and sustainable development.

iii. To use existing mechanisms within the OAS and others such as the World Bank country assistance strategies to strengthen synergies in areas related to cooperation, environmental laws and compliance.

iv. To strengthen collaboration and participation of indigenous people within the OAS in processes such as the Bolivia Ministerial Meeting to improve governance in the hemisphere.

v. To emphasize the social aspects of sustainable development in particular in the area of social conflicts, poverty and environmental degradation.

vi. To have the OAS serve as a forum and a leader to exchange information regarding best practices in sustainable use of natural resources, including from the Brazilian ARPA initiative in protected areas as well as on possibilities to strengthen green markets.