



APPRAISAL REPORT

CAO Appraisal for Audit of IFC

CAO Compliance

C-I-R9-Y11-F134

February 8, 2012

**Pando and Monte Lirio Hydropower
Chiriquí Viejo River, Panama**

Summary

On January 26, 2010, the CAO received correspondence from 16 organizations that alleged that the planned Pando and Monte Lirio hydroelectric developments (the Project) on the Chiriquí River in Panama violated a number of IFC policy provisions. The Pando and Monte Lirio are two of a series of approximately 14 hydroelectric developments planned for the Chiriquí River basin.

The overarching concern raised by the complainants can broadly be defined as related to the quality of, and consultation concerning, the documents and studies available at the time IFC decided to invest in the Project.

The CAO finds that IFC identified and assessed all the major concerns raised by the complainants that related to the direct impacts of Project.

The CAO finds that IFC identified and, based on the information available, assessed the Project's contribution to the potentially cumulative impacts of future development.

The CAO finds that at the time of the investment decision, details about the potential cumulative impact of the development of the entire Chiriquí Viejo River basin were not defined.

The CAO finds that a compliance audit at this stage of IFC's engagement in the Pando Monte Lirio project would yield limited information beyond what is already documented.

The CAO concludes that this case does not merit an audit of IFC's due diligence of its involvement linked to the Pando Monte Lirio project. The CAO will close this case and take no further action.

Office of the Compliance Advisor/Ombudsman (CAO)
for the
International Finance Corporation (IFC)
Multilateral Investment Guarantee Agency (MIGA)
Members of the World Bank Group



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About the CAO

The CAO's mission is to serve as a fair, trusted, and effective independent recourse mechanism and to improve the environmental and social accountability of IFC and MIGA.

The CAO (Office of the Compliance Advisor/Ombudsman) is an independent post that reports directly to the President of the World Bank Group. The CAO reviews complaints from communities affected by development projects undertaken by the two private sector lending arms of the World Bank Group: the International Finance Corporation (IFC) and the Multilateral Investment Guarantee Agency (MIGA).

For more information about the CAO, please visit www.cao-ombudsman.org

1. Overview of the CAO Compliance Appraisal Process

When the CAO receives a complaint about an IFC or MIGA project, the complaint is first referred to the ombudsman arm of the CAO, *CAO Ombudsman*, which works to respond quickly and effectively to complaints through facilitated settlements, if appropriate. If CAO Ombudsman concludes that the parties are not willing or able to reach a facilitated solution, the case will be transferred to the compliance arm of the CAO, *CAO Compliance*, to appraise the concerns raised in the complaint for a *compliance audit* of IFC or MIGA. Alternatively, a compliance audit can be initiated by request from the President of the World Bank Group, the senior management of IFC or MIGA, or at the discretion of the CAO Vice President.

A *CAO compliance appraisal* is a preliminary investigation to determine whether the CAO should proceed to a compliance audit of IFC/MIGA. Through CAO compliance appraisals, the CAO ensures that compliance audits of IFC/MIGA are initiated only for those cases that may raise substantial concerns regarding social or environmental outcomes.

A compliance audit is concerned with assessing the application of relevant policy provisions and related guidelines and procedures to determine whether IFC/MIGA is/are in compliance. The primary focus of compliance auditing is on IFC/MIGA, but the role of the sponsor may also be considered.

A compliance audit appraisal, and any audit that ensues, must remain within the scope of the original complaint or request. It cannot go beyond the confines of the complaint or request to address other issues. In such cases, the complainant or requestor should consider a new complaint or request.

The CAO compliance appraisal will consider how IFC/MIGA assured itself/themselves of compliance with national law, reflecting international legal commitments, along with other audit criteria. The CAO has no authority with respect to judicial processes. The CAO is not an appeals court or a legal enforcement mechanism, nor is the CAO a substitute for international court systems or court systems in host countries.

The appraisal criteria are set forth in CAO's Operational Guidelines. The criteria are framed as a series of questions to test the value of undertaking a compliance audit of IFC or MIGA. The criteria are as follows:

- Is there evidence (or perceived risk) of adverse social and environmental outcomes that indicates that policy provisions (or other audit criteria) may not have been adhered to or properly applied?
- Is there evidence of risk of significant adverse social and environmental outcomes that indicates that policy provisions, whether or not complied with, have failed to provide an adequate level of protection?
- Is there evidence (or perceived risk) of significant adverse social and environmental outcomes where policy provisions, standards, or other audit criteria were not thought to be applicable but perhaps should have been applied?



- Is there evidence that the application of some aspect of a policy, standard, guideline, or procedure resulted in adverse social and environmental outcomes?
- Can the cause of adverse social and environmental outcomes not be readily identified and corrected through the intervention of the project team without a detailed investigation of the underlying causes or circumstances?
- Could a compliance audit yield information or findings that might better inform the application of policies (or other audit criteria) to future projects?

During appraisal, CAO Compliance holds discussions with the IFC/MIGA project team and other relevant parties to understand the validity of the concerns and to explore whether an audit would be warranted.

After a compliance appraisal has been completed, the CAO can choose only one of two options: to close the case, or to initiate a compliance audit of IFC/MIGA.

The CAO will report and disclose the findings and decision of the CAO compliance appraisal in an appraisal report in order to inform the President of the World Bank Group, the Boards of the World Bank Group, senior management of IFC/MIGA, and the public in writing about its decision.

If the CAO decides to initiate a compliance audit as a result of the compliance appraisal, the CAO will draw up a Terms of Reference for the audit in accordance with the CAO's Operational Guidelines.

2. Background and Concerns that Led to the Appraisal

On January 26 2010, the CAO received correspondence from 16 organizations that alleged that the planned Pando and Monte Lirio hydroelectric developments (the Project) on the Chiriquí River violated a number of IFC policy provisions. The Project cost is estimated to be \$291.7 million. IFC's proposed investment consists of a \$25 million A loan, a \$15 million C Loan, and an IFC Swap with an initial loan-equivalent exposure amount of up to \$5 million.¹ The Pando and Monte Lirio are two of a series of approximately 14 hydroelectric developments planned for the Chiriquí River basin.

The complainants claimed that:

- The Project lacked several studies, or that further studies were needed to understand the environmental and social impact of the Project. These included an updated and more complete environmental impact assessment (EIA), integral studies of the river basin and its hydrological capacity, and an assessment of other alternatives and how these compare to the proposed Project. As an extension of this concern, the complainants questioned the quality of the EIA, as well as its data and conclusions. They also stated they did not believe the available documents were based on up-to-date designs.
- The cumulative impact of a series of hydropower projects along the river is unsustainable and will result in a variety of negative environmental and social impacts, including:
 - jeopardizing local stakeholders' access to water along the Chiriquí River, leaving only 10 percent of flow compared to claimed prior levels
 - interrupting the natural movement of fish and other aquatic species
 - destroying forested areas along the riverbanks
 - creating high levels of sedimentation and reducing organic sediments that affect water quality and natural habitats, and harming sensitive ecological systems
 - depleting wells or water springs downstream
 - increasing salinization of water and subsequently reducing land productivity and impairing the livelihoods of local farmers.
- The development of the project will have the following social and economic impacts:
 - increased migration from outside areas that threatens local customs and lifestyles
 - economic displacement of those whose livelihoods have been harmed
 - increased local conflicts centered on the presence of the Project and competing interests over water resources
 - decrease in recreational activities along the river
 - damage to local access roads and other infrastructure due to use of heavy machinery and equipment for project construction
 - decline in tourism activities and opportunities such as whitewater rafting
 - land conflicts related to purchase of land bordering the river
 - increased risk to community health and safety due to increased likelihood of flooding and the dams' location in a zone with seismic and possible volcanic activity
 - potential risks to health and safety of Project employees.
- Communities were not consulted adequately before the project was approved.

¹ IFC Summary of Proposed Investment, "Pando Montelirio," available at www.ifc.org



The CAO deemed the complaints eligible for assessment in February 2010, and the CAO Ombudsman began the assessment of opportunities for resolving the issues in the complaint. The CAO found that not all the stakeholders were interested in participating in a dialogue process and in April 2011, the complaint was transferred to CAO Compliance for appraisal.

The complainants filed complaints simultaneously with the CAO and the independent recourse mechanism of the Inter-American Development Bank (IDB), the Independent Consultation and Investigation Mechanism (ICIM). The CAO and ICIM released a joint Conclusion Report in April 2011. The CAO has communicated with the IDB's Compliance Review Panel on procedural matters and timing so as to not obstruct the independent processes of the CAO or the IDB's Panel.

Investment Background

The Pando and Monte Lirio power projects are hydroelectric power developments on the Chiriquí Viejo River (CVR) in western Panama. The Project involves the construction of two hydroelectric power plants to be operated in cascade, totaling 85 mega-watts (MW) installed.

The Project is being developed by Electron Investment S.A. (EISA) (the Company), a Special Purpose Vehicle (SPV) company registered in Panama.

IFC concluded that the Project would have a fairly limited direct footprint, that it would not cause the physical displacement of people, and the land acquisition involved only private owners. IFC also stated that the Project site had no primary forest, and consists mostly of pastures, agricultural cropland, and patches of secondary riparian forest and low shrubs. However, IFC noted that a medium to large reservoir, the Pando daily regulation reservoir, would have to be built, and that could have potential negative environmental consequences.

In addition, during IFC's environmental and social appraisal site visit, the Company was in the process of consolidating the hydro-biological baseline of the Chiriquí Viejo River at the direct impact zone. Therefore, at the time of appraisal, IFC found that there were only limited data to support the finding that the project would have no significant or permanent impacts on natural habitats. Furthermore, IFC noted that Pando and Monte Lirio are two of a series of approximately 14 run-of-river hydroelectric developments foreseen for the CVR basin. The significance and magnitude of the potentially cumulative impact was being assessed at the time of IFC's appraisal. Therefore, given the degree of uncertainty associated with the potentially direct ecological impacts, and the possibility that some cumulative impacts may be irreversible and may involve a diverse group of stakeholders, IFC classified the Project as a Category A project.²

² Category A projects are expected to potentially have significant adverse social and/or environmental impacts that are diverse, irreversible, or unprecedented. See IFC Environmental and Social Review Summary of "Pando Montelirio," available at www.ifc.org

3. Scope of the Appraisal for a Compliance Audit of IFC

As discussed in Section 1, CAO appraisals are limited to examining the issues related to a complaint and determining how they relate to the performance of IFC/MIGA and its/their obligations under the relevant standards, guidelines, and procedures. A CAO compliance appraisal of IFC therefore focuses on how IFC assured itself of the environmental and social performance of the project being reviewed, and whether or not decisions made during IFC's processing of the investment were aligned with relevant applicable standards and the desired effect of IFC's policy provisions.

IFC Standards, Guidelines, and Procedures

The framework of IFC's due diligence is provided by IFC's Performance Standards, in combination with relevant EHS (Environmental, Health and Safety) Guidelines, as well as applicable sector guidance notes.

IFC's environmental and social due diligence indicated that the investment will have impacts that must be managed in a manner consistent with the following Performance Standards:

- PS1: Social and Environmental Assessment and Management Systems
- PS2: Labor and Working Conditions
- PS3: Pollution Prevention and Abatement
- PS4: Community Health, Safety and Security
- PS5: Land Acquisition and Involuntary Resettlement
- PS6: Biodiversity Conservation and Sustainable Natural Resource Management

The Environmental and Social Review Procedures require IFC to review the project against the Performance Standards and good international practice standards, as set out in the EHS Guidelines. In addition, an assessment typically includes a review of the track record, technical capacity, corporate and project-specific management systems of the client/operator, and mitigation measures for business and technical risk and associated risks.

IFC's Due Diligence and Follow-up

The 2009 IFC appraisal discussed environmental and social concerns in the context of the strategic fit of the Project into IFC applicable strategies, the management capacity of the client (the Company), the risk related to the Engineering, Procurement and Construction (EPC) contract, and the risk related to management capacity and construction supervision, as well as the more direct environmental and social issues. Main topics included the significance and magnitude of cumulative impacts due to the overall development of the Chiriquí Viejo River and the accuracy and relevance of the 2002/03 impacts assessments for Pando and Monte Lirio plants.

Based on the EIAs, IFC identified the following major direct impacts of the Project:³

- direct impacts associated with construction
- modification of the hydrological and sediment load dynamics of the Chiriquí Viejo River
- potential negative impacts on aquatic ecosystems, including the potential net loss of species sensitive to particular characteristics of water quality and flow

³ IFC Environmental and Social Review Summary, "Pando Montelirio." Available at www.ifc.org

- potential invasion of exotic species as a result of a changed hydrologic dynamic
- potential increase in erosion due to construction activities, human intervention, the increased daily fluctuation in the river, and increased access to the river and the area
- potential negative impacts on terrestrial ecosystems as a result of the modifications in the area directly and indirectly impacted by the Project
- potential impacts on socioeconomic dynamics
- potential impacts on tourism activities
- potential impacts and risk associated with the construction of the tunnels and the operation of heavy equipment and machinery
- potential socioeconomic impacts associated with land acquisition and changes in land use
- potential loss of archeological sites/artifacts
- potential indirect impacts to migrant crop workers who are Indigenous Peoples, and who have been reported to seek employment in the Project area occasionally and in small numbers
- dam safety, and emergency and community preparedness downstream.

IFC identified the uncertainties related to, and the need to evaluate, the cumulative potential impacts on the CVR basin should all 14 power plants planned by the Government of Panama be built.

IFC noted that a preliminary study identified potential cumulative impacts of development of the CVR basin to be:

- hydrological modifications of the CVR, including changes in natural seasonal flow fluctuations, water quality, and the sediment transport dynamics
- geo-morphological changes in the CVR watershed as a consequence of deforestation, agriculture, and the sustained increase in erosion resulting from changes in land use
- fragmentation and potential degradation of natural habitats as a consequence of the hydrological and geo-morphological modification
- interference with free movement of animal species that currently migrate up and down the CVR in different stages of their lifecycle, such a migratory fish, which migrate upstream during breeding season, and the neo-tropical river otter, which move up and down the stream to forage and find food
- potential socioeconomic impacts, including impacts on existing and future uses of the waters of the CVR for human consumption, agriculture, and commercial and tourism activities (such as whitewater rafting).

IFC further analyzed the contribution of the Pando and Monte Lirio plants to the potential overall cumulative impact on the CVR basin. IFC found their potential contribution to the cumulative impact on hydrological and geo-morphological modification not to be significant, and the impact on tourism (rafting) not to be directly related to the construction of Pando and Monte Lirio.

Later, IFC worked to develop a detailed environmental and social action plan, as well as independent verification of the quality of the consultations carried out with potentially impacted stakeholders.

4. Findings of the CAO Appraisal

The overarching concern raised by the complainants can broadly be defined as related to:

- the quality of, and consultation concerning, the documents and studies available at the time IFC decided to invest in the Project.

These documents and studies can in turn be divided into three main topic areas:

- direct impacts as a consequence of construction works and the establishment of the plant, transmission lines, facilities, and access infrastructure
- the Project's contribution to the potential cumulative impacts should some or all of the planned 14 plants be built
- the overall development of the CVR basin, and the cumulative and total impact of as many as 14 cascading plants.

The CAO appraisal specifically examined how well IFC, during its due diligence, dealt with, or failed to deal with, these three main topic areas.

The CAO finds that IFC, at the time of appraisal, identified a number of further actions to be undertaken, including further assessment of terrestrial and hydro-biological baseline data in order to design appropriate mitigation measures, further consultation on subsequently updated assessments, and development of a cumulative impact assessment. The CAO finds that IFC was well aware of, and identified, the same issues raised by the complainants regarding the available documentation. IFC identified and defined actions to close the knowledge gaps and initiate consultation around the outcomes. However, IFC made a judgment call that the information available in November 2009, including the preliminary cumulative impact assessment, the draft EIA for the transmission lines, and the studies on aquatic baseline data and archeological sites, gave them confidence that the environmental and social impacts of the Project, as well as its contribution to potentially cumulative impacts on the CVR basin, were manageable and defensible given IFC's policy provisions. IFC also confirmed the client's commitment to a detailed environmental and social action mitigation plan.

The CAO finds that IFC identified and assessed all the major concerns raised by the complainants that related to the direct impacts of Project.

The CAO finds that IFC identified and, based on the information available, assessed the Project's contribution to the potentially cumulative impacts of future development.

The CAO finds that at the time of the investment decision, details about the potential cumulative impact of the development of the entire CVR basin were not defined.

The situation and approach taken raises the systemic question of whether to proceed with private sector development in an environment where the information needed to fully assess the rationale behind larger strategic development decisions taken by third parties, or host governments, is not available. This leads to challenges not only in the context of assessing risk to the particular project, but also as to how IFC can assure itself that meaningful consultations around potential impacts have taken place/will take place, when the impacts of such large developments have yet to be fully assessed.

The CAO finds that in this specific case, IFC argues that the cumulative impacts attributable to the IFC-sponsored Project are not significant, and that the direct impacts of the Project are manageable.

5. The CAO Decision

The appraisal criteria set forth in CAO's Operational Guidelines are as follows:

- Is there evidence (or perceived risk) of adverse social and environmental outcomes that indicates that policy provisions (or other audit criteria) may not have been adhered to or properly applied?

In this case, the answer is No. The CAO finds that the policy provisions applicable to the specific Project have been adhered to and applied. The CAO finds that IFC made a judgment call to delineate the impacts of the overall development on the CVR basin, based on its assessment of the impacts attributable to the Project, using data available at the time of the decision.

- Is there evidence of risk of significant adverse social and environmental outcomes that indicates that policy provisions, whether or not complied with, have failed to provide an adequate level of protection?

In this case, the answer is No, not on the specific project level.

- Is there evidence (or perceived risk) of significant adverse social and environmental outcomes where policy provisions, standards, or other audit criteria were not thought to be applicable but perhaps should have been applied?

In this case, the answer is No.

- Is there evidence that the application of some aspect of a policy, standard, guideline, or procedure resulted in adverse social and environmental outcomes?

In this case, the answer is No.

- Can the cause of adverse social and environmental outcomes not be readily identified and corrected through the intervention of the project team without a detailed investigation of the underlying causes or circumstances?

IFC is well aware of the challenges when sponsoring a project in a less than perfect environment, and the challenges incorporated in the decision as to whether IFC serves its mandate best by getting engaged and thereby influencing further outcomes, or by not getting engaged.



- Could a compliance audit yield information or findings that might better inform the application of policies (or other audit criteria) to future projects?

The question is whether IFC has strategic guidance in order to make judgment calls on overall engagements that are aligned with the desired effect of the policy provisions. A compliance audit at this stage of IFC's engagement in the Pando Monte Lirio project would yield limited information to that effect.

The CAO concludes that this case does not merit an audit of IFC's due diligence of its involvement linked to the Pando Monte Lirio project. The CAO will close this case and take no further action.