Extractive Industries: Opportunities for Environmental Funds

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RedLAC Capacity Building Project for Environmental Funds

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Latin American and Caribbean
Network of Environmental Funds

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The Latin America and Caribbean Network of Environmental Funds – RedLAC – was created in 1999 and currently includes 22 funds from 16 countries. Its mission is to set up an effective system of learning, capacity building and cooperation through a Network of Environmental Funds (EFs) aimed at contributing to the conservation and sustainable use of natural resources in the region.

RedLAC, with the support of the Gordon & Betty Moore Foundation and the French Fund for the Global Environment (FFEM, for its name in French), implements a capacity building project with the objective of strengthening the capacity of EFs to develop innovative financial mechanisms for biodiversity conservation, reducing their dependence on donations, and supporting the establishment of new EFs, by systematizing and sharing proven best practices in funds day-to-day operations.

This project, coordinated by the Brazilian Biodiversity Fund – Funbio - on behalf of the RedLAC membership, has the goal of promoting the implementation of new revenue streams for the Funds' portfolios, creating financially sustainable sources of funding for these institutions to invest in conservation. Having knowledge management as its core, the project will systematize the existing information on different topics of interest for EFs and build new content based on the collective experience of the Funds' community.

This Handbook has been prepared for the 10th workshop of RedLAC's capacity building project. It focuses on extractive industries as they are particularly relevant to EFs in Africa. Funbio organized this workshop in collaboration with CAFÉ – the Consortium of African Funds for the Environment – and with the Sangha Tri-National Foundation - FTNS - in the city of Douala, Cameroon, on September 15 to 17, 2014.

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FFEM Fonds Français pour l'Environnement Mondial

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Table of Contents

5 Acronyms and abbreviations

7 Introduction

9 The context of extractive industries in Africa

15 Integrating conservation in the extractive sector

21 Examples and challenges

25 RedLAC Case studies

43 Conclusions

51 Glossary

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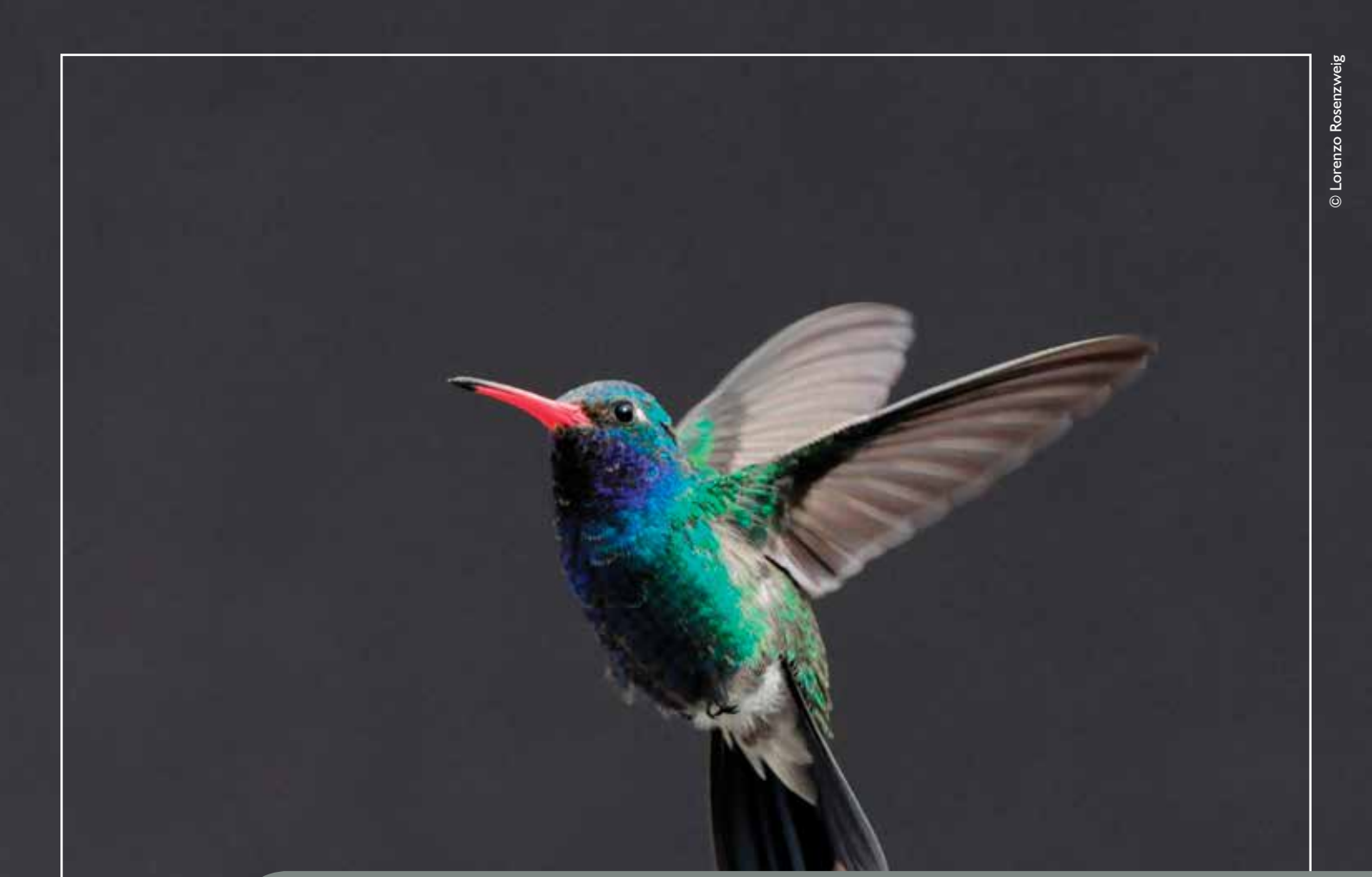
Acronyms and abbreviations

Acronyms and abbreviations	Definition
BBOP	Business and Biodiversity Offsets Programme
BES	Biodiversity and Ecosystem Services
CAFÉ	Consortium of African Funds for the Environment
CBD	Convention on Biological Diversity
CCB Standards	Climate, Community, and Biodiversity Standards
CCBA	Climate, Community, and Biodiversity Alliance
CDM	Clean Development Mechanism
COP10	10th Conference of the Parties
COP9	9th Conference of the Parties
CSBI	Cross Sector Biodiversity Initiative
CTF	Conservation Trust Fund
EBI	Energy & Biodiversity Initiative
ECA	Export Credit Agency
EF	Environmental Fund
EIA	Environmental Impact Assessment
EITI	Extractive Industries Transparency Initiative
EPAP	Equator Principles Action Plan
EPFI	Equator Principles Financial Institutions
ESHIA	Environmental, Social, and Health Impact Assessment
ESIA	Environmental and Social Impact Assessment
FDI	Foreign Direct Investment
FMU	Forest Management Units
FSC	Forest Stewardship Council
Funbio	Fundo Brasileiro para a Biodiversidade (Brazilian Biodiversity Fund)
FUNDESNAP	Fundación para el Desarrollo del Sistema Nacional de Áreas Protegidas (Bolivian Environmental Fund)
GDI	Green Development Initiative
GEF	Global Environment Facility
GFN	Global Footprint Network
GN	Guidance Note
GSF	Gold Standard Foundation
HCV	High Conservation Value
HCVRN	High Conservation Value Resource Network
ICMM	International Council on Mining and Metals
ICT	Information and Communication Technology
IDH	Het Initiatief Duurzame Handel (The Sustainable Trade Initiative)
IESC	Independent Environmental and Social Consultant
IFC	International Finance Corporation
IPIECA	Global Oil and Gas Association for Environmental and Social Issues (formerly International Petroleum Industry Environmental Conservation Association)
IUCN	International Union for Conservation of Nature
IUCN CEM	IUCN Commission on Ecosystem Management

JBIC	Japan Bank for Internation Cooperation
LNG	Liquefied Natural Gas
MLA	Mandated Lead Arrangers
MMDA	Model Mine Development Agreement
MNE	Multinational Enterprises
MZ LNG	Mozambique Liquid Natural Gas Project
NGO	Non-Government Organisation
ODA	Official Development Assistance
OECD	Organization for Economic Co-operation and Development
OGP	International Association of Oil & Gas Producers
PCI	Principles, Criteria and Indicators
PIF	Project Identification Form
PS	Performance Standard
RA	Rainforest Alliance
REDD+	Reducing Emissions from Deforestation and Forest Degradation
RedLAC	Red de Fondos Ambientales Latinoamérica y el Caribe (Latin America and Caribbean Network of Environmental Funds)
SAI	Sustainable Agriculture Initiative
TBC	The Biodiversity Consultancy
UNDP	United Nations Development Programme
UNEP	United Nations Environment Programme
UNEP WCMC	UNEP World Conservation Monitoring Centre
VCA	Verified Conservation Area
WBCSD	World Business Council on Sustainable Development
WCS	World Conservation Strategy
WDPA	World Database on Protected Areas
WRI	World Resource Institute
WWF	Worldwide Fund for Nature
YLNG	Yemen LNG Company



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Introduction

Over the last fifteen years, Environmental Funds (EFs) have been set up in more than 50 developing countries in Latin America, the Caribbean, Africa and the Asia-Pacific regions. EFs have been recognised as one of the most efficient mechanisms to ensure long-term support for biodiversity conservation as demonstrated by their ability to mobilise significant financial resources from a variety of sources and to involve a diverse set of stakeholders in the implementation of conservation programmes.

To support the development of EF's, RedLAC established a capacity building project which is coordinated by Funbio (the Brazilian Biodiversity Fund).[1] This project aims to strengthen the capacity of EFs through the exchange of the network members' experiences and innovative practices. This includes joint learning activities with the growing number of African EFs, currently congregated in CAFÉ – the Consortium of African Funds for the Environment.[2]

This Handbook has been prepared for the 10th workshop of RedLAC's capacity building project. It focuses on extractive industries as they are particularly relevant to EFs in Africa. First, extractive industries have a significant impact on biodiversity including ecosystem services and need to adopt best practices for their operations. Second, they have the capacity to provide significant resources for conservation programs. The goal of this workshop is to collectively analyse the present context of extractive industries in Africa and explore different ways in which EFs can work with these companies.

[1] See: http://redlac.org/ and http://www.funbio.org.br/, respectively.
[2] See: http://www.consortiumcafe.org/.

Extractive industries are a central and pressing issue across the African continent taking into account the vast amount of natural resources available. A broad range of actors is necessary to ensure that the wealth produced from mining operations translates into sustainable social and economic development that has minimal net impact on biodiversity. In this context, EFs have to develop strategies and tools to promote transparency with the extractives sector and to facilitate financing processes which are crucial role to restoring and conserving biodiversity.

The workshop includes mix of presentations, general discussions and working group sessions to enable an interactive process for grappling with the myriad of challenges and opportunities related to engaging with extractive industries. Each of the workshop sessions is supported by a selection of readings and, in some cases, videos. Case studies – both from across Africa and abroad – feature prominently throughout the sessions. The selected readings and vídeos are available at redlac10.earthmind.net.

By the end of the workshop, participants are expected to have an in depth understanding of why and how they might engage with extractive industries to conserve biodiversity in Africa – including through mobilising new resources for conservation. Participants should also have begun to formulate strategies and plans for moving forward in their own contexts. In this regard, we hope that this Handbook and the supporting readings and videos provide a useful resource beyond the workshop to help the members of CAFÉ mitigate the impacts of mining on biodiversity and make mining a responsible source of finance for conservation.

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The context of extractive industries in Africa

1.FDI & Extractive Industries in Africa Today

Though the extractive industry sector – minerals, oil and gas – has a long history in Africa, the sector is developing especially rapidly today. Importantly, it is a key sector for Foreign Direct Investment (FDI). This session focuses on beginning to understand where the money is in Africa, where it is coming from and where it is going.

We look at the broader topic of FDI in Africa and then at the flow of FDI going into the extractives sector. The aim is to have a better understand of FDI in Africa and, in particular, in the countries of the participants.

Supporting Readings[3]

1Aa - African Economic Outlook 2014 - Pocket Edition
1Ab - Perspectives economiques en Afrique 2014 - Edition de Poche

Official Development Assistance (ODA), Remittances, and Foreign Direct Investment (FDI) are the largest sources of wealth transfer from the global north to the global south. ODA remains the largest source despite recent declining trends, but Remittances and FDI are growing. There are good prospects for increasing participation in the global value chain by African nations, through forward and backward integration to increase FDI. FDI value capture strategy is dependent on local socioeconomic conditions, so integration and upgrading strategies will vary between countries.

[3] The annotations for the readings are adapted in most cases from the readings themselves.

1B - With a little help from my friends - FDI in Africa

Foreign Direct Investment (FDI) from multinational corporations (MNEs) both within and outside of Africa has positive effects on domestic economies. Improvement of policy infrastructure is needed to facilitate growth driven by MNE investment.

1C - Oil and mining to be the backbone of East Africa's economic recovery

The economic prospects for production of fuel and precious minerals in Africa are great. There are concerns over the 'Resource Curse', where an economy becomes dependent on non-renewable resources and subject to exogenous shocks to the global market and over extraction resulting in degradation of the natural capital (clean air, clean water, forests, wildlife, etc.).This concern is ameliorated in part where economies are already sufficiently diversified – i.e. the extractive industry will become a sector of the economy rather than dominating it. Greater participation in the global supply chain is needed to capture the greatest portion of rents generated through resource extraction to avoid the pitfalls experienced previously in the agricultural sectors.

1D - Can Mozambique's growth story be sustained?

Large reserves of natural gas and coal in Mozambique are drawing in FDI. However there are concerns over whether rents will be captured by local economies and if the national economy is developed enough to avoid dependence on fossil fuel exports – making Mozambique susceptible to exogenous market shocks.

1E - Gas Discoveries in East Africa

It has been an astonishing past year for gas discoveries in east Africa. Large finds off the coasts of Mozambique and Tanzania have turned those countries into major players in the world gas market.

1F - Making extractive industries truly transformative for Africa

FDI, largely drawn in by Africa's large fossil fuel and mineral reserves, has had a role in the continent's rapid economic growth in recent years. This presents an opportunity to use revenues to address widespread poverty and income inequality through improved socioeconomic development programs. Success in this effort is dependent on developing policy and linkages to other sectors as proactive defences against "Dutch Disease" and the "Resource Curse". Linkages between sectors will mitigate third party impacts of currency appreciation and concentration of labour and financial resources, while policy reforms can address aggressive rent seeking, corruption, and leakages which limit national economic growth and generate large wealth gaps.

1G - Minerals can boost well-being in developing countries

The 'Resource Curse' is not an inevitable fate for developing countries rich in high value resources such as minerals and fossil fuels. Possessing large stocks of resources can lead to economic growth rates higher than global averages if there is political infrastructure and transparency sufficient to handle large state revenues, deter aggressive rent seeking and corruption, and facilitate spill over to infrastructure and social development of the local communities.

1H – An Alternative Investment Framework for Africa's Extractive Sector

The paper argues that while the current global economic crises present much tougher challenges for delivering on the alternative agenda, the apparent failure of state mining policies to achieve economic transformation and recent mining reforms agenda provide opportunities for an alternative agenda. African civil society working with allies and partners in the global south and north provide strategic levers for sustained campaigns and pressure for the delivery of an alternative agenda to current state mining policies.

1I - Extractive Natural Resource Development

The huge (potential) resource wealth of many African countries is opening up considerable opportunities for the acceleration of economic transformation and sustained poverty alleviation through industrial policies promoting linkages between extractive natural resource sectors and the rest of the economy, through increased revenues to spend in productive and social sectors, and through governments' greater room for manoeuvre in pursuing their own policies as aid dependency declines.

2. Key International Standards & Commitments

As many of the companies operating in the extractives sector are multinational and much of the investment in this sector is international, business and financing decisions are increasingly being driven by international environmental standards and commitments. In Session 2, we explore some of the key environmental standards and commitments influencing investments in the extractives sector in Africa.

Regarding FDI, two key developments are the OECD Common Approaches for export credits and the Equator Principles for commercial finance. Both of these are based on the environmental and social performance standards of the IFC.

Increasingly extractive industries – mining, oil and gas – are also making public commitments to environmental and social responsibility. Some of these commitments are through participation in relevant associations focuses on sustainability, such as the Global Compact, the International Council for Mining and Minerals, and the IPIECA.

Supporting Readings

2A - Sustainable Export Finance – A Challenging Task for ECAs and Exporters

Export Credit Agencies (ECAs) benefit through increased long term security in their investments through consideration of the potential environmental and social impacts caused by the projects they finance. Projects often employed the rules of the country they were located in for environmental and social impact review, which presented the problem of inconsistency. The OECD common approaches sought to address this issue through developing international project standards for ECAs. Further development of international standards is needed which are more inclusive of project impacts to the environment and local communities, yet can still be implemented feasibly. As participation by non OECD countries increases in global markets, additional mechanisms are needed to extend the OECD common approaches to projects in these countries.

2Ba - OECD Common Approaches [Note: Sections V and VI]

2Bb - OCDE Approches Communes

Extractive resources generally (but not necessarily) are classified as Category A projects due to their "potential to have significant adverse environmental and/or social impacts, which are diverse, irreversible, and/or unprecedented" which impact an area beyond the planned project footprint. Finance for such projects is contingent on preparation of an Environmental and Social Impact Assessment (ESIA) under section V, and monitoring to ensure that appropriate impact mitigation measures are being implemented properly under section VI.

2Ca - Equator Principles [Note: Principles 3 and 4]

2Cb - Principles de l'Equater

The Equator Principles require an ESIA for Category A and B projects. These projects are defined similarly to the OECD Common Approaches. Extractive projects will likely fall under one of these categories. Furthermore the Equator Principles Financial Institutions (EPFIs) have compiled a list of countries with robust environmental and social policy in place. Principle 3 states that projects in these countries will follow locally designated best management practices and impact review requirements, where projects outside of these countries will default to the International Finance Corporations (IFC) Performance Standards (PS). Principle 4 states that an Environmental and Social Management Plan must be prepared to ensure impacts are avoided and minimized to the greatest extent possible during operational activities.

2Da - IFC Performance Standards [Note: Overview and PS 6]

2Db - IFC Normes de performance

The IFC Performance Standards are part of its overall sustainability framework which includes the IFC Policy and Performance Standards, and the IFC Access to Information Policy. The performance standards are intended to

direct corporate actions and international investment in a manner in line with the IFCs commitment to sustainable development. PS6, in particular, concerns management of biodiversity and living natural resources.

2Ea - Global Compact Environment Principles

2Eb - Aperçu du Pacte Mondial

The 1972 Summit on the Human Environment in Stockholm, Sweden inspired the formation of the United Nations Environment Programme (UNEP) (1973). Since this date the UNEP has lead the effort to stem degradation of natural resources, including biodiversity and ecosystem services. The Global Compact Environmental Principles are adapted from Agenda 21 adopted at the Earth Summit in Rio in 1992. The three environment principles of the Global Compact encourage business operations to take a precautionary approach (Principle 8) where potential impacts are assessed and mitigated pre-emptively; to increase corporate environmental responsibility (Principle 9); and to encourage development and diffusion of environmentally friendly technologies (Principle 10).

2F - Global Compact Africa Strategy

Recent years have shown a net loss in United Nations Global Compact participants in Africa. The global compact seeks to motivate responsible business practices which have positive effects in the areas of human rights, labour, environment, and combating corruption. The Africa Strategy seeks to increase participation by businesses in African Countries, particularly those countries which currently have no Global Compact representation.

2Ga - ICMM 10 Principles

2Gb - ICMM Les 10 principes

The International Council on Mining and Metals (ICMM) 10 principles for sustainable development are benchmarks by which member companies can measure sustainable development performance associated with their projects.

2H - ICMM Mining and Protected Areas

ICMM has issued a position statement declaring the commitment by its members to respected legally designated protected areas, to not explore or mine in UNESCO World Heritage Sites, and transparent decision making processes.

2I - IPIECA Vision, Mission and Membership Commitment

IPIECA was formed in 1974 following the formation of the UNEP in 1973. Much like the ICMM, IPIECA promotes sustainable development within the countries with member operations, environmental and social responsibility, and stakeholder engagement.

2Ja - IPIECA Ecosystems

Biodiversity and human welfare are inextricably linked, most saliently through the provision of ecosystem services which the oil and gas industry depends on. IPIECA has several publications on best practices for incorporating biodiversity and ecosystem services (BES) conservation into operation activities, and is committed to being a leader for integration of BES concepts and practices across all operations.

2K - Biodiversity and the Extractive Industry

Developing nations are home to areas with some of the highest biodiversity on the planet, creating potential conflict where development interests are at odds with biodiversity conservation. It is important to manage these conflicts as biodiversity and the associated provision of ecosystem services are part of a nation's natural capital. A step towards balancing development and conservation interests is through the valuation of ecosystem services provided by existing natural capital.

3. IFC Performance Standard 6

A major investment driver for biodiversity responsibility is Performance Standard 6 of the International Finance Corporation (IFC). The IFC is the private sector arm of the World Bank Group and invests in private sector projects "end extreme poverty by 2030" and "boost shared prosperity—in every developing country." PS6 addresses the impacts of private sector projects on "Biodiversity Conservation and Sustainable Management of Living Natural Resources."

- The objectives of PS6 are "to protect and conserve biodiversity," "to maintain the benefits from ecosystem services," and to promote the sustainable management of living natural resources through the adoption of practices that integrate conservation needs and development priorities." These objectives provide the structure for the Standard.

In this session, we look in detail at how PS6 is structured, what conservation issues it addresses and where it might provide opportunities for conservation finance.

Supporting Readings

3Aa – IFC PS6

3Ab - IFC Critères de Performance 6

The IFC PS6 text including an overview of all the IFC Performance Standards, the scope and requirements of PS6 with respect to biodiversity, and definitions of key terms.

3Ba - IFC GN6

3Bb - IFC Recommandation 6

The guidance note for IFC PS6 provides extended explanations for elements of IFC PS6 and their implementation.

3C - IFC PS6 Presentation [Note: Focusing on biodiversity offsets]

IFC PS6 presentation prepared by the Business and Biodiversity Offsets Programme (BBOP) highlighting key elements of IFC PS6, how biodiversity is highlighted in PS6 over time, and how the PS6 in practice is changing.

3D - Biodiversity Consultancy on PS6

The Biodiversity Consultancy's (TBC) statement on IFC PS6 and the Mitigation Hierarchy. TBC identifies PS6 as the key driver for corporate environmental management, and outlines the critical steps for implementing an environmental management programme.

3E – EBI Biodiversity Indicators

Using an approach based on risk assessment, this document outlines a methodology for developing site-level indicators to monitor significant positive and negative biodiversity impacts and company-level indicators to inform and report on the approach taken to biodiversity conservation at a strategic level.

4. Case Study – Mozambique LNG

One of the largest gas developments in Africa is underway in the far north of Mozambique. The four major concession holders are Anadarko (US), ENI (Italy), Petronas (Malaysia), and Statoil (Norway). Current Anadarko and ENI are most active in establishing Mozambique LNG which will build an LNG facility on the coast as well to liquefy the gas extracted offshore.

Supporting Video

Video A - Anadarko Mozambique LNG Project Vision 2013

Supporting Readings

4A - Anadarko Mozambique Fact Sheet

Flyer outlining Anadarko Petroleum Corporation's commitment to environmental and social responsibility for liquid natural gas development projects in Mozambique.

4B - Anadarko in Mozambique

Summary of Anadarko's environmental and social responsibility strategy. Development programmes include job training for local communities, and investment in environmental programmes like the Niassa Lion Project.

4C - Environmental and Social Management Brochure

A summary of the environmental and social management plans for the Mozambique Gas Development Project in Cabo Delgado.

4D - MZ LNG EIA Non-Technical Summary

Non-technical description of the Mozambique Liquid Natural Gas Project (MZ LNG) in Cabo Delgado, including the existing environmental and social setting, potential environmental and social impacts, alternative project analyses, and mitigation strategies.

4E - MZ LNG EIA Chapter 1 Introduction

Introduction chapter to the MZ LNG Project technical environmental impact assessment (EIA). This chapter gives and overview of the project's regulatory context, document structure, and qualifications of the report preparers.

4F - MZ LNG EIA Chapter 4 Project Description

Detailed description of the MZ LNG Project including setting, timeline, construction methods, operation details, and plans for decommission for onshore and offshore facilities.

4G - MZ LNG Chapter 16 Impact Assessment Summary

Summary of potential environmental, social, and economic impacts resulting from the MZ LNG Project as described in Chapter 4 of the EIA.

4H - EIB Incorporating Biodiversity into ESIA Process

The principal purpose of this document is to offer appropriate guidance on the integration of biodiversity into an ESIA. Biodiversity should be integrated into each relevant stage of the ESIA process by expanding the scope of analysis to include biodiversity characteristics, evaluating impacts holistically using a wider ecosystem approach as recommended in the CBD, and considering long-term and cumulative secondary impacts in addition to more immediate, primary impacts.

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Integrating conservation in the extractive sector

5. Key Conservation Tools for the Extractive Sector

In addition to PS6, there are several other conservation tools available for the extractives sector including industry guidance from IPIECA and ICMM, ecosystem reviews, biodiversity offsets, and verified conservation areas. The application of any of these tools may provide additional opportunities for securing financing for conservation, including long-term financing.

Supporting Readings

5Aa - IPIECA Managing Biodiversity Impacts

5Ab - IPIECA 10 clés de la réussite

10 IPIECA tips for managing primary and secondary impacts to biodiversity arising from project activities. Each tip is followed by the title of a supporting document for reference.

5B - ICMM Good Practice Guidance for Mining and Biodiversity

Principle 7 of the ICMM 10 Principles for sustainable development (see reading 2G) states that projects should "contribute to conservation of biodiversity and integrated approaches to land use planning". Following this the ICMM has produced a guide for best management practices for biodiversity conservation in mining operations. The guide outlines biodiversity management at exploration, construction, operation, and decommission phases, as well as tools for impact avoidance, minimization, and stakeholder engagement.

5Ca - WBCSD WRI Corporate Ecosystem Services Review

5Cb - WBCS WRI Evaluation des Services redus par les Ecosystemes aux Enterprise

The World Business Council for Sustainable Development (WBCSD) and World Resources Institute (WRI) have prepared a guide outlining the importance for performing an ecosystem services review (ESR) for identifying business risks and opportunities in a changing environment – especially when business operations themselves are the drivers of change. The review introduces ecosystem services concepts, methods for performing and ESR, and tools which are available for the ESR process.

5D - IPIECA Ecosystem Services Guidance

The aim of this industry association guide is threefold. Firstly, it explains the relationship between biodiversity, ecosystem services and the oil and gas industry. Secondly, it provides a set of checklists to help identify the main ecosystem service dependencies and impacts of oil and gas developments. Thirdly, it highlights key associated risks and opportunities for oil and gas companies, and provides guidance on potential measures for managing them.

5E - ICMM IUCN Biodiversity Offsets

ICMM and the IUCN have prepared a guide to biodiversity offsets for the mining industry. The guide defines biodiversity offsets and compares offsets to ecosystem services, implementation and measurement of offset programs, and next steps for improvement of the biodiversity offsets strategy.

5F - BBOP Standard on Biodiversity Offsets

The Business and Biodiversity Offset Programme (BBOP) Standard on Biodiversity Offsets contains a set of principles that offsets are intended to achieve, criteria for achieving each principle, and success indicators for each criterion. The biodiversity offsets standard also outlines compatibility with BES strategies and compensation programmes for impacts which have already occurred and/or are unavoidable.

5G – VCA Standard

The Verified Conservation Areas (VCA) Platform seeks to encourage land management which has a positive impact on biodiversity. The VCA Standard outlines criteria for listing an area in the VCA Registry including publishing audited conservation management plans and annual audited conservation performance reports. The associated VCA Toolkit provides recommended guidance for best practices for particular landscapes and land uses.

5H - CSBI Timeline Tool

The Cross Sector Biodiversity Initiative (CSBI) is the result of a partnership between IPIECA and ICMM. CSBI identifies the three simultaneous timelines in the project life cycle: Financial, Environmental Impact Assessment and Mitigation, and the Project Timeline itself. These are often asynchronous and therefore can constrain the level of environmental review and mitigation that occurs prior to the finalisation of project financing and commencement of construction. CSBI provides a framework for managing timelines to optimise implementation of finance, environmental and social responsibility, and project activities.

5Ia - RedLAC Environmental Funds and Compensation and Offset Schemes

5Ib -RedLAC Les fonds environnementaux et les mecanismes de compensation et doffset

The Latin American and Caribbean Network of Environmental Funds (RedLAC) seeks to scale up environmental funds through creation of a network for collaboration and coordination between funding organizations. RedLAC has prepared a text describing the role of biodiversity offsets and compensation mechanisms within the mitigation hierarchy and environmental planning, how environmental funds can be implemented for offset and compensation programs, and future directions for environmental funds.

6. Extractive Industry Case Studies - Africa

Industry associations, such as IPIECA, ICMM, WBSCD, and various conservation initiatives present a number of case studies on biodiversity conservation and the extractives in Africa. These cases demonstrate both the challenges and the opportunities of securing financing for conservation from this sector.

Supporting Video

Video B - Anglo American - Increasing Awareness of Biodiversity

Supporting Readings

6A - Namibia - Anglo American

Exploration in biodiversity hotspots and sensitive habitats can potentially result in large impacts in these areas, particularly in later stages involving larger mining camps and intensive drilling. The Skorpion zinc mine operated by Anglo American provides a case where impacts were minimized and restored within the project budget.

6B - Madagascar – QMM

QIT Madagascar Minerals developed an extensive monitoring and community engagement programme for restoration efforts in mining areas. Such programmes are critical for development and evaluation of restoration methods, management practices, and stakeholder engagement.

6C - South Africa - Anglo American

Anglo American's Gamsberg Zinc Project was determined to have extensive impacts on rare and endemic flora, which conservation groups felt were inadequately addressed in assessments and mitigation plans. Lack of trust initially prohibited cooperation, however through a systematic conservation planning process engaging surrounding land owners a satisfactory plan was developed to achieve conservation goals and mitigate mining impacts to the area.

6D - Angola – Angola LNG (36% owned by Chevron)

Angola LNG implemented Chevron's Environmental, Social, and Health Impact Assessment (ESHIA) methods to avoid and minimise project impacts to the greatest extent possible. Through utilisation of the Wildlife Conservation Society's expertise, Angola LNG was able to have a positive impact on local wildlife and engage local community members in conservation activities.

6E - DRC – SOCO

When the Democratic Republic of the Congo (DRC) awarded SOCO an oil concession which included a portion of the Virunga National Park, there was an outcry from the conservation community. Currently SOCO will not use its concession, unless there is agreement between the UNESCO World Heritage Programme and the DRC Government that condones the action. High demand for oil and development, however, will drive pressure to drill in the future despite the current agreement. Alternative sustainable industries are being promoted in the park including hydropower, fisheries, and ecotourism. All of these industries will also have impacts on the park, but they may not generate the same revenues for conservation as could oil extraction.

6F - Swaziland - Ngwenya Mine

The Ngwenya Mine in northern Swaziland have tentative listing status under the UNESCO World Heritage Programme due to its long history dating back as far as 42,000 years before present. Current operation has jeopardized the mine's application to be a listed world heritage site due to poor environmental performance, largely resulting from inadequate environmental and social impact review. The Swaziland Environment Fund has been paying for clean-up of water contamination and health impacts local communities from dust generated by mining and transport

operations; however the mine is not replenishing the fund under the National Environment Act as operators refuse to acknowledge responsibility for these impacts.

6G - Case Study - Uganda – Bundongo

The VCA Proposal for the Budongo Forest Reserve in Uganda identifies its conservation goals to reduce illegal harvest of bush meat and timber, and increased community involvement. Listing under the VCA Registry would enable the VCA Facility to broker funding from donors to realise conservation goals.

6H - Four Partnership Case Studies in Africa

USAID and Conservation International have assembled 4 case studies examining partnerships between extractive resource projects, NGOs, and governments. The document highlights common attributes present in successful partnerships between stakeholders, and lays out a roadmap for developing such partnerships.

7. Regional and National Drivers in Africa

Each country in Africa faces its own mix of opportunities and challenges regarding conservation financing and the extractives sector. Nevertheless, in terms of the Convention on Biological Diversity (CBD), all of these countries are committed to mobilising new resources for biodiversity. Sources of funding could include obligatory compensations, fines and penalties, support for corporate social responsibility, and market-based instruments.

The CBD Strategy for Resource Mobilisation is presented in this session as a framework for considering options at the national level and, in some instances, the regional level. The introductory presentation also summarises the key topics covered in the supporting readings.

Supporting Readings

7Aa - CBD COP Decision IX-11 Strategy for Resource Mobilisation

7Ab - CBD COP Decision IX-11 Stratégie pour la mobilisation des ressources

The Strategy for Resource Mobilisation establishes seeks to increase funding for biodiversity conservation, particularly where current funding gaps exist. The guiding principles of the strategy are to promote efficacy, efficiency, innovation, and awareness while building synergies and raising awareness of issues with consideration of gender and socioeconomic perspectives. The strategy encourages global south-south financial support where feasible to supplement global north-south financial support. It also includes under Goal 4 a focus on innovative financial mechanisms.

7B - Extractive Sector Regulations and Policy in Africa

Currently only a fraction of the available extractive resources are being developed. Increasing investment in fossil fuels and mineral extraction is predicted to change this, and are expected to provide revenues for social and economic development within the states they are located in. This process has three primary goals which can be at odds depending on the national policy framework, local stakeholders, and environmental setting. Resources are sought to be utilized in a manner that: 1) is environmentally and socially sustainable, 2) drives development of local economies, and 3) generates revenues which are equitably distributed between industry, government, and society. This will require policies which address all three goals, engagement of local communities through job training and placement programmes, and transparency in the decision making process.

7C - Transparency and Accountability in Africa's Extractive Industries

Though extractive resources are touted as a major driver for socioeconomic development in Africa, they often tend to inspire aggressive rent seeking from project operators and governments which implement authoritarian, and

at times corrupt, policies which restrict the distribution of those resource rents to the broader society. A strong set of national policies are needed to manage revenues generated from natural resources, to hold actors and decision makers accountable, and to provide transparency in decision making to the public domestically and internationally.

7D - Extractive Industries Transparency Initiative

The Extractive Industries Transparency Initiative (EITI) has developed a standard which governments can implement to meet the need for demonstrating dedication to policy reform and prevention of corruption. The standard requires companies to disclose payments made, and for governments to disclose payments received, transfers to local governments, and other investments made in social and infrastructure projects.

7E - Improving Mining Tax Administration and Collecting

This sourcebook identifies the fundamental conflict between states and operators who are simultaneously trying to maximize their share of the economic rents generated. States feel entitled to capture the value of their resources, while companies argue that excessive profits make the risk of unsuccessful exploration manageable. The sourcebook look at types of revenue streams, policy frameworks, and institutional structures which can address this conflict.

7F - Trade-offs between Conservation and Mining Laws in the DRC

Multiple stakeholder groups are at odds with the ambiguous structure of resource management laws in the DRC. There exists conflicts among legal terminology, jurisdiction, procedure, and among the stakeholder groups themselves which are often at odds (mining v. forestry v. biodiversity).

7G - Mining and Biodiversity Guideline - Executive Summary

This Mining and Biodiversity Guideline from South Africa identifies key strategies for managing impacts associated with mining operations. A robust ESIA is needed to quantify potential impacts such that the mitigation hierarchy (avoid, minimise, restore, offset) can be most effective. Furthermore the guideline outlines six principles for success: 1) Enforce existing laws; 2) Use best available information; 3) Thoroughly engage stakeholders; 4) Use best practices in performing ESIAs; 5) Develop environmental management programmes through the mitigation hierarchy; and 6) Ensure implementation and adaptive management of environmental management programmes.

7H - Mining and Biodiversity Guideline – 2013

Detailed description of key strategies for managing environmental impacts associated with mining and implementation of the six principles for success.

7I - Mining and Biodiversity Guideline – Poster

Graphic to visually supplement the South African Mining and Biodiversity Guideline including a representation of the mitigation hierarchy.

7J - Mining and Biodiversity in South Africa - A Discussion Paper

This paper provides an overview of the mining industry's relationship with biodiversity conservation. Key conclusions are that systematic conservation planning is a powerful tool, there is growing awareness and receptiveness towards biodiversity conservation in the mining sector, and legislation in South Africa mandates consideration of biodiversity issues in decisions and actions. This helps to ensure that systematic conservation planning is valuable to the mining industry.

7K - New Conservation Areas Act of 2013 - Mozambique

The New Conservation Areas Act of Mozambique is a recent law which "establishes the basic principles and rules for the protection, conservation, restoration and sustainable use of biodiversity in conservation areas, as well as an integrated management framework for the sustainable development of the country." The act highlights

principles of Ecological Heritage, Equality, Public-Private Partnerships, Environmental Responsibility including the precautionary approach, and Socioeconomic Development.

7L - Corporate Social Responsibility and Development in Africa

This article draws attention to the shortcomings of strategies that have led to measures in the name of CSR that do not address the origins that give rise to problems. No quantity of CSR can correct deeply rooted and country-specific structural issues.

8. Including Conservation Finance in Mining Agreements

Ultimately the rights and responsibilities for extractive industries – mining, oil and gas – are set by the State. Thus a contractual mining agreement can play a critical role in determining what, if any, resources generated by the extractive operations can be earmarked for conservation.

Building on the discussions of international standards, particular IFC PS6, and relevant developments in various African countries, the participants break into working groups to review the readings for this session and to propose elements of a guideline for mainstreaming biodiversity conservation and conservation finance into extractive industry agreements. The elements may at a later stage be incorporated into a strategy for CAFÉ members or form the basis for a CAFÉ guideline or policy statement.

While considering how biodiversity may be mainstreamed into an extractive industry agreements, participants should also take into account the overlapping rights and responsibilities for land use that are often allocated by different government ministries and departments. These may include access to minerals, timber concessions, hunting, water rights, agricultural development, and road building.

Supporting Readings

8A - Model Mine Development Agreement – Summary

The Model Mine Development Agreement (MMDA) is a tool designed to help negotiating parties better understand mining agreements and therefore reach more equitable outcomes for states and more stable investment conditions for the mining operation.

8B - Model Mine Development Agreement – Booklet

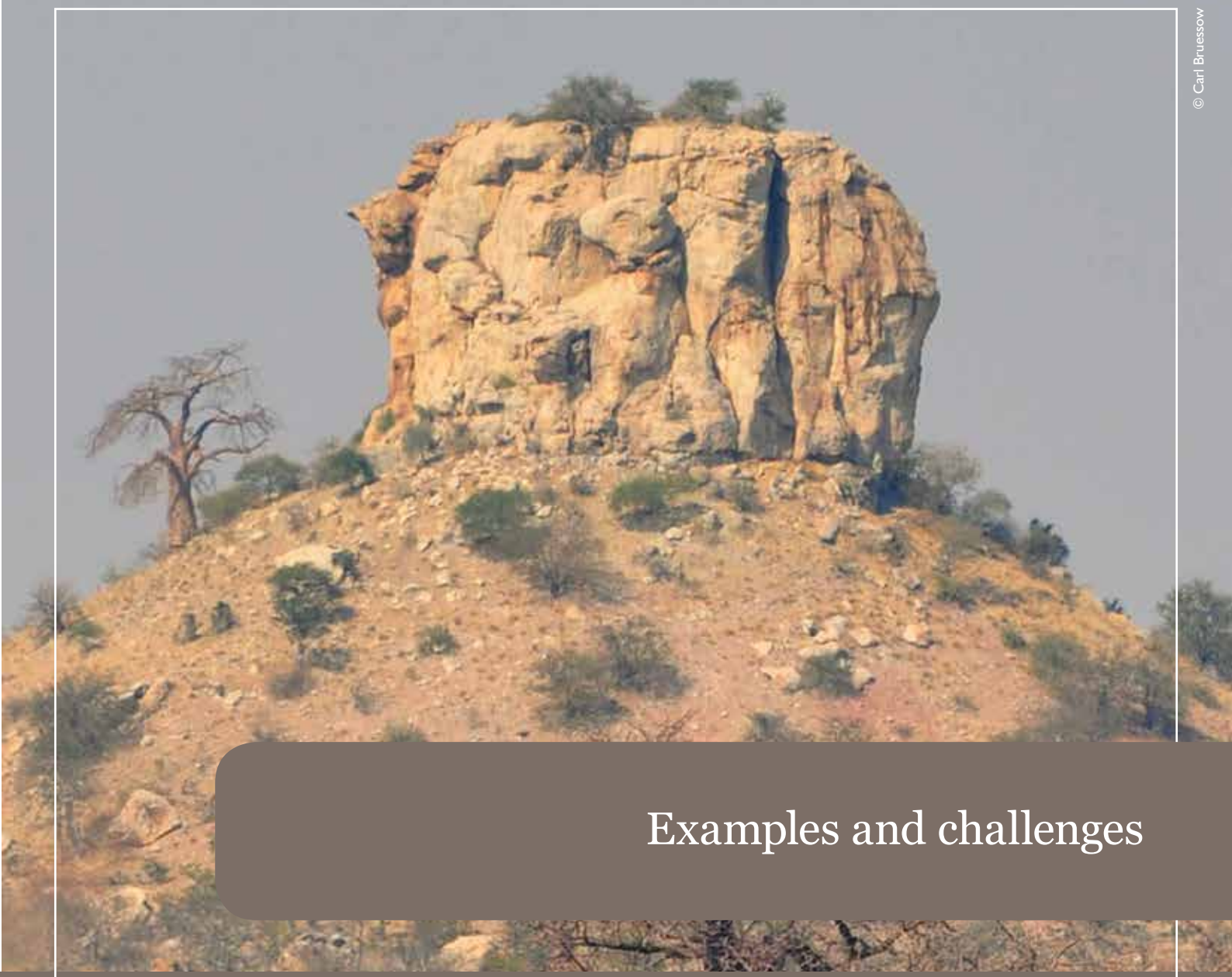
The MMDA Booklet provides a template by which equitable mining agreements may follow to make negotiations more accessible for all parties.

8C - MMDA Example – Liberia

MMDA Template applied to an agreement between Liberia and China-Union Mining Co. for mining iron ore in the Bong mountain range.

8D - MMDA Example - Zambia

MMDA Template applied to an agreement between Zambia and Konkola Copper Mines PLC for several mining operations in the Copperbelt and Lusaka Provinces.



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Examples and challenges

9. Case Studies – Outside of Africa

There is much to be learned from efforts to promote biodiversity conservation in the extractive industry outside of Africa. This session includes two cases from Latin America (see cases at the end of the handbook) as well as a case from Europe and another from the Middle East.

Supporting Readings

9A - Extractives Industry Cases from Latin America

Five short summaries of environmental funds and their role in mining offsets and compensation in Latin America.

9B - Russia - South Stream Offshore Pipeline – NTS

Non-Technical Summary of the South Stream Offshore Pipeline in Russian waters in the Black Sea and the landfall area, including the existing environmental and social setting, potential environmental and social impacts, alternative project analyses, and mitigation strategies.

9C - Yemen - YLNG Biodiversity Action Plan

Biodiversity Action Plan prepared for their Balhaf Harbour Liquefaction Facility on the Gulf of Aden. The plan covers an overview of biodiversity, the project description, and biodiversity issues associated with the project. It outlines YLNG's commitment to conserving biodiversity, and describes monitoring and reporting strategies.

10. Case Study – Niger Delta Biodiversity Project

Perhaps the most famous – or some would say infamous – setting for extractives in Africa is the Niger Delta. By some estimates, it is the largest revenue generator on the continent, but little of this revenue is directed for conservation. Hence, UNDP has developed a GEF project to engage oil and gas companies operating in the Niger Delta for biodiversity conservation. Though just underway, the project includes a plan to establish a biodiversity trust fund for the region.

Supporting Videos

Video C - Coastal pollution fears after Nigeria oil spill

Video D - Oil pollution in the Niger Delta

Supporting Readings

10A - GEF Niger Delta Biodiversity Project

Table from the Global Environment Facility (GEF) showing funding amounts and sources for the Niger Delta Biodiversity Project

10B - GEF Niger Delta Biodiversity PIF

The Project Identification Form (PIF) identifies the Niger Delta Biodiversity Project's components, consistency with the GEF and State priorities, project risks, and justification for receiving GEF funding.

10C -UNDP Niger Delta Biodiversity Project Document

Description of the Niger Delta Biodiversity Project and how it will achieve its goal of "mainstreaming biodiversity management priorities into the oil and gas sector development policies and operations." The document discusses the risks, assumptions, monitoring, evaluation, budget, and the legal context associated with the project in detail.

10D - USAID Partnering with Extractives for Biodiversity in Africa

An analysis of opportunities for USAID to engage with extractive industries on biodiversity issues. This document includes methods for risk and potential impact analysis, actors and organizations in the extractive industries, biodiversity issues, governance, and the business case for biodiversity conservation.

10E - The World Bank Group in the Extractives Sector

The World Bank Group has been working to build programmes which link extractive resources to economic development across the value chain. This goal has been approached through World Bank financing programmes, and partnerships with organizations providing technical assistance to developing governance programs and for addressing efficiency issues in the operations themselves.

10F - UNDP Extractive Industries Strategy Note

The management of extractive sectors (oil, gas and minerals) is a major challenge and opportunity for developing countries today. It is the design and implementation of a broad set of policies that determines whether countries can harness extractive resources for sustainable development for all. This paper proposes a UNDP strategy to support the efforts of resource-rich developing countries to design and implement such policies.

11. Challenges facing CAFÉ Members

CAFÉ members participating in the workshop have an opportunity in this session to present the challenges they are facing in their home countries to establish and scaling up conservation financing structures which are capable of engaging with extractive companies. The supporting readings provide a sample of relevant information on developments underway in various African countries and potentially useful supporting guidance.

Supporting Readings

11A - The Case of the Madagascar Foundation

A presentation by the Madagascar Foundation examining the efficacy of trust funds for financing conservation. The endowment fund had secured commitments totalling more than $50M USD, of which just over $13M USD had been disbursed at the time of the presentation. Sinking funds were utilized by the Malagasy government to add security to fund conservation initiatives including establishment of a national parks service. Key lessons learned were to establish support from the local government as early as possible, identify/build strong managerial structure, and develop a strong fund raising plan.

11B - Eastern Arc Mountain Conservation Endowment Fund - Fund Raising

The Eastern Arc Mountain Conservation Endowment Fund in Tanzania presents its fundraising and resource mobilisation strategies.

11C - Strategic Business Plan of the Environmental Investment Fund of Namibia

The Environmental Investment Fund (EIF) Business Plan presents an overview of the EIF, how it will move from objectives and strategies to implementation, how it will mobilise resources for implementation, stakeholders in the EIF, EIF Management, and EIF Governance.

11D - Creation of a Conservation Trust Fund in Mozambique

The Feasibility Study for Creation of a Conservation Trust Fund (CTF) in Mozambique identifies the legal, regulatory, and financial setting in Mozambique, and recommends a CTF design and implementation plan for the given context.

11E - Road Map for the Mozambique Conservation Trust Fund

Following the above Mozambique CTF feasibility study in 2008, a CTF was set up called BIOFUND in 2009. This document provides a status update on BIOFUND, and additional steps needed for implementation.

11F - IUCN Operational Guidelines for Private Sector Engagement

IUCN seeks to collaborate with businesses to "create a just world that values and conserves nature". The IUCN can provide value to business through providing credible knowledge on natural resource conservation, strong reputation, and global reach through its network. The Operation Guidelines for Private Sector Engagement offer twelve principles for ethical and practical partnerships with business, which highlight transparency and active stakeholder participation.

12. CAFÉ Members Approaches to Extractive Industries

In the closing session, participants explore possible approaches that CAFÉ members could adopt with respect to engaging extractives. In addition to reflections on the previous sessions, the supporting readings provide further background information which may be useful in shaping such approaches. In turn, approaches and priorities identified in this session may lead to new programmes of work for CAFÉ and its members. These could include guidelines for engagement with extractives, a watching brief on FDI flows into the extractives sector in Africa, or scaling up the application of tools such as biodiversity offsets and verified conservation across Africa.

Supporting Readings

12A - Extractive Industries and Natural World Heritage sites

UNESCO has identified that a significant proportion of listed Wold Heritage Sites are currently or will be under development pressure in the future do to the presence of precious minerals or fossil fuel deposits either within or in close proximity World Heritage Areas.

12B - Governance of the Extractive Industries in Africa

Extractive resources are potential sources of large revenues for development in African countries, however many countries have not been able to channel extractive resource revenues into socioeconomic development. This has been cited as due to lack of capacity for such activities, but there is little information on whether and how much aid is devoted towards capacity building for capturing revenues for development. This report establishes a base line for how much governments are contributing to providing financial support for public sector projects related to governing extractive resources.

12Ca - RedLAC - Resource Mobilisation Mechanisms

12Cb - RedLAC - Mécanismes de mobilisation des ressources

RedLAC seeks to scale up mobilization of resources for conservation projects through environmental funds. The text describes the policy setting surrounding mobilisation of resources, with particular emphasis on Aichi Targets 11, 15, and 21, and the Convention on Biological Diversity Strategy for Resource Mobilisation (derived from CBD Articles 20 and 21 addressing the need for provision of financial resources and a mechanism to facilitate such provision). Traditional sources of funding, mobilisation requirements, and innovative funding sources (e.g. carbon finance for conservation) are discussed within the above policy context.

12Da - RedLAC - Governance Strategies

12Db – RedLAC - Stratégies de Gouvernance

Responsible and effective governance are critical to the creation and management of a successful environmental fund. Successful governance is visible, accountable, and actively engages stakeholders. RedLAC describes the details of successful governance for Environmental Funds and achievement strategies. Case studies in environmental fund governance are presented at the end of the text.

12Ea - RedLAC - Fundraising Strategies

12Eb - RedLAC - Stratégies de Levée de Fonds

RedLAC presents the modern fund raising challenges and opportunities that environmental funds face. With this context, RedLAC provides a step by step guide to fund raising for environmental funds, development of institutional capacity and supervisory boards, followed by case studies, work shop exercises, and take home messages.

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Case Studies

Biodiversity impact offset: partnering with the extractive sector in Colombia

1. An overview of Colombia's biodiversity

Colombia is ranked internationally as one of the most mega-diverse countries, with only 0.22% of the earth's land territory being home to about 10% of the currently known species on the planet. It is the first country in species of birds (1,889 species) and amphibians (763 species) and is also rich in mammals (479 species)[1]. The country also houses approximately 40,000 species of plants, accounting for 15% of global diversity.

Due to deforestation and unsustainable land transformation, biodiversity in Colombia is being lost at an alarming rate. The main causes of deforestation are land use changes for agriculture, infrastructure projects, illegal crops, internal migration, mining, legal and illegal extraction of timber and forest fires. The expansion of cattle ranching is the main driver of deforestation and land use change. Over the past fifty years the areas devoted to cattle ranching in Colombia increased dramatically from 14.6 to 39 million hectares.

According to the Fifth National Report on Colombian Biodiversity for the Convention on Biological Diversity there are other key drivers challenging the Colombian biodiversity2, namely the decrease, loss or degradation of native ecosystems and agro-ecosystems, invasive species, water pollution and climate change.

[1] National Biodiversity Information System of Colombia: http://www.sibcolombia.net/web/sib/cifras
[2] http://www.co.undp.org/content/colombia/es/home/library/environment_energy/v-informe-nacional-de-biodiversidad-de-colombia-ante-el-convenio/

The Country Environmental Analysis developed by the World Bank states that environmental degradation in Colombia generates a cost equivalent to 3.5% of GDP; this includes costs associated to floods, landslides and soil degradation.

2. Overview of the partners

2.1 Fondo Acción

Fondo para la Acción Ambiental y la Niñez (Fondo Acción) is a Colombian nonprofit private foundation established in 2000. Its mission is to generate sustainable changes in Colombian society in two areas: (1) the conservation and sustainable use of biodiversity and the protection of ecosystem services; and (2) the protection and development of vulnerable children, with emphasis on early childhood.

Fondo Acción has a solid track record in financial administration, program management and conservation finance, which includes the creation and management of endowments, sinking and revolving funds and the design of innovative financial mechanisms for conservation.

Fondo Acción facilitates the implementation of projects by civil society organizations, in partnership with local environmental authorities, the private sector, international NGOs, and the national government. It acts normally as a second-tier organization that provides support on technical and administrative issues, strengthening institutional capacities. More recently Fondo Acción has begun direct implementation of projects and programs.

2.2 AngloGold Ashanti (AGA)

AngloGold Ashanti (AGA) is a world-leading gold mining company, with headquarters in Johannesburg, South Africa. Its Colombian subsidiary, AGA Colombia, has been active in the country since 2003. As of August 2014 it has a project portfolio in six sites of the country; while some projects are more advanced than others all are either in the exploration or design phase.

AGA Colombia is interested in developing programs and projects beyond the scope of mandatory Colombian legal standards on environmental matters. It intends to implement long-term initiatives that promote best practices in mining and biodiversity conservation.

3. Fondo Acción's initiative with AGA Colombia

Between 2010 and 2014 AGA Colombia and Fondo Acción have partnered to develop three initiatives:

1. The Coello River Basin fund;
2. The Responsible Mining and Regional Development Program; and
3. The Gramalote Biodiversity Offsets Strategy.

The first two follow a traditional type of interaction between an Environmental Fund (EF) and a donor where the private company provides funding under its Corporate Social Responsibility practices and the EF sets up a separate account for the donation, manages the funds, selects and finances projects by local NGOs and/or community based organizations and reports to the donor. The EF thus acts as a second-tier organization.

The third initiative is an example of a new role by an EF. In the Gramalote project Fondo Acción is in charge of providing a specific product: a strategy for the company to offset impacts on biodiversity resulting from the Gramalote gold mining project in the Antioquia region. This is more the case of a contractual relationship between the company and the EF.

3.1 The Coello River Basin fund (CRB-f)

The Coello River Basin fund (CRB-f) focuses on stepping up sound environmental management of water resources by communities in the Coello River Basin. Fondo Acción and AGA Colombia signed a memorandum of understanding whereby Fondo Acción agreed to set up and manage the Coello River Basin fund (CRB-f). This sinking fund provides funding to projects presented by local NGOs and grassroots associations of the Coello River Basin, in the Andean department of Tolima. Within this agreement, AGA Colombia made a contribution of US$265.000.

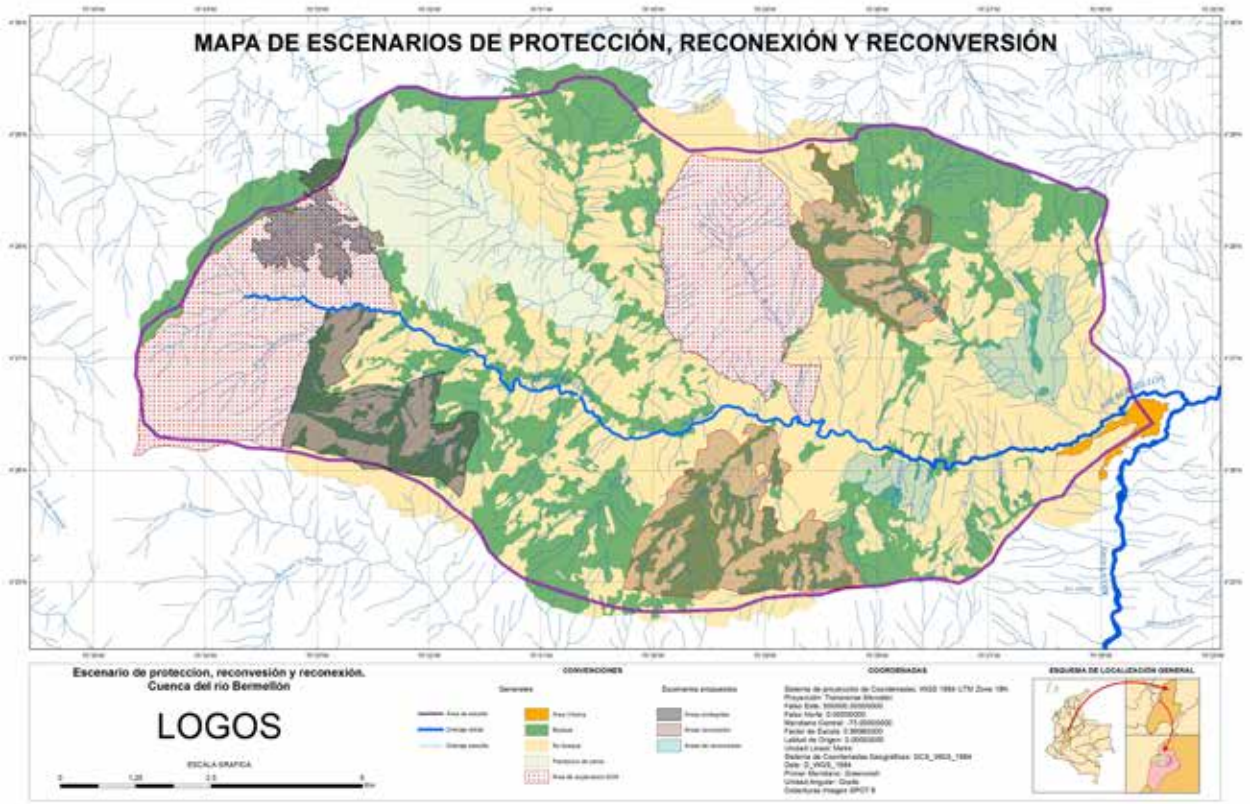


Figure 1: Department of Tolima, Coello River Basin

Fondo Acción conducted a process of stakeholder analysis and consultation and designed and implemented a competitive Request for Proposals (RFP). The consultation process revealed that water management was a key issue for the local organizations. Ten projects were then selected and funded. These initiatives reduced water pollution and improved water use efficiency in the basin. Fondo Acción provided technical and administrative backstopping to all projects, monitored and assessed implementation and presented final results to the donor, including video recordings of beneficiaries.

The main results generated by the Coello River Basin portfolio were:

- A pilot system for water recycling in aquaculture;
- Seven water reservoirs plus efficient irrigation systems in farms;
- Forty-five methane gas production plants for domestic use;
- Domestic sewage management improved with septic tanks;
- Ninety-two domestic water treatment plants;
- Reforestation with native species of areas around springs and water courses;
- Improved productive systems in five farms (including water management and biodiversity conservation); and
- Increased trust between local organizations and AGA Colombia.

3.2 The "Responsible Mining and Regional Development" Program

Following the successful implementation of the CRB-f, AGA Colombia decided to renew its partnership with Fondo Acción through a second grant in 2012 (US$880.000). This donation allowed Fondo Acción to establish a

> **"This project aims to improve the social, economic and environmental performance of artisanal and small scale gold mining in Colombia"**

> **The project intends to generate impacts at a national scale through capacity building and policy transformation actions**

sinking fund with the goal of linking responsible mining and regional development in Colombia. These resources were once again part of the company's Corporate Social Responsibility commitments. Two projects have been designed and are being implemented:

3.2.1 Project 1: Development of market incentives and formalization of artisanal small-scale mining

This project aims to improve the social, economic and environmental performance of artisanal and small scale gold mining in Colombia. In March 2013 Fondo Acción selected a proposal presented by the Alliance for Responsible Mining (ARM). ARM is a global independent initiative established in order to improve equity and well-being of artisanal small-scale mining communities. ARM intends to incorporate best environmental and social practices and to formalize Artisanal and Small-scale Mining Organizations (ASMO) in Bolivia, Colombia and Peru. The grant provided by Fondo Acción under the Responsible Mining and Regional Development Program focuses on Colombian ASMOs. The path to formalization is based on gold certification by Fairtrade and Fairmined standards. ARM´s role includes:

- Strengthening the capacity of local organizations and specialized consultants who can provide support for artisanal and small scale miners;
- Assist ASMOs in the formalization and implementation of better social and environmental practices;
- Connect ASMOs to formal markets and increase demand and visibility of the Fairtrade and Fairmined certified gold standards; and
- Strengthen ARM's Network for Responsible Mining, in order to enhance knowledge management, improve coordination among relevant stakeholders, facilitate lessons learnt about the formalization of ASM in Latin America and visualize the complex situation of this industry.

Fondo Acción provides technical and administrative support to ARM, conducts technical and administrative monitoring and evaluation of the project and reports progress and results to the donor.

After the first year of operation ARM has conducted a detailed due diligence process and selected three ASMOs located in the department of Bolivar, in northern Colombia. ARM has carried out a baseline characterization and begun the formalization process leading to the adoption of best mining and environmental practices in these three cases.

The project intends to generate impacts at a national scale through capacity building and policy transformation actions. The adoption of better environmental practices will take place in three small mining operations in the Andean foothills of the department of Bolivar.

3.2.2 Project 2: Water for Cajamarca

This project has been designed by Fondo Acción with the goal of promoting an integrated management approach for important micro-catchments in the Bermellón River Basin. The region is part of the area of influence of AGA Colombia's gold mining project "La Colosa". The catchments are sources of water for the people of the town of Cajamarca, in the department of Tolima. Water sources will be protected and biodiversity conservation will be enhanced through the establishment of protected areas, the restoration of natural habitats and the reconversion of traditional cattle ranching practices to low-impact environmentally-friendly schemes.

Fondo Acción will implement the project directly, based on its experience under the GEF funded project "Conversion to Sustainable Cattle Ranching in Colombia". After selecting the areas of intervention based on environmental, social and productivity criteria, Fondo Acción will launch an RFP to bring interested farmers as beneficiaries. Fondo Acción will monitor and evaluate progress of beneficiaries through the entire project life.

Fondo Acción has prepared a detailed plan for the intervention, including detailed maps of land cover and current land use. A general assessment of farmer interest was also part of the first phase and this enabled Fondo Acción to identify a target population for the intervention.

3.3 Development of a biodiversity offsets strategy for the Gramalote mining project

Fondo Acción, AngloGold Ashanti and Gramalote Colombia Limited, signed a third agreement in 2012 to produce the offsets strategy for the Gramalote gold min-

ing project. This agreement was possible thanks to the positive results of the feasibility study for an offset plan, oriented by the methodology of the "Business and Biodiversity Offsets Program" (BBOP), conducted in partnership with Forest Trends and Wildlife Conservation Society. The project is located in the department of Antioquia, in the central Andes of Colombia.

Fondo Acción administers the resources allocated by AGA and Gramalote Colombia Limited to this purpose and has signed contracts with Conservation International Colombia, the Wildlife Conservation Society and Forest Trends; these three technical partner agencies are in charge of conducting field work and designing the strategy. The amount of this agreement is US$ 645,000.

The partnerships work under the following logic:

- Conservation International Colombia is responsible for preparing the component that meets requisites set by the Handbook for Environmental Offsets, a policy framework adopted by the Colombian Ministry of the Environment in order to guide the development of these strategies by the corporate sector; and
- The Wildlife Conservation Society and Forest Trends are responsible for designing the strategy following the Business and Biodiversity Offsets Program Standard (BBOP Standard). Compliance with the BBOP Standard and with Performance Standard 6 (PS6) is required by the International Finance Corporation (IFC), where the companies expect to apply for financing.

The offset strategy following the Colombian Handbook has been finished, including a valuation of ecosystem services. The offset strategy under BBOP and PS6 will be available by September 2014. The Strategy for Gramalote has been chosen by the National Agency for Environmental Licensing (ANLA) as a pilot case study for the Handbook.

4. History of the partnership and future scenarios

4.1 The backstory

In 2009 the company´s gold mining operation at La Colosa, in the Andean region of Tolima, was at the exploration stage. Despite this incipient development the project was being strongly criticised by local environmental NGOs and other groups. AGA Colombia was thus exploring the possibility of partnering with national environmental NGOs and other organizations in order to deal with this public opinion crisis; the company was also interested in approaching local stakeholders to gain social licence in order to operate in the area.

AGA conducted an assessment of several environmental NGOs operating in Colombia and in late 2009 company officials contacted Fondo Acción. They were attracted by the Fund's network of NGOs and CBOs and by its experience in allocating resources to local projects through competitive and transparent procedures. The company also valued Fondo Acción's Quality Control System, developed under the ISO 9001 Quality Standard.

This initial approach generated new meetings and a due diligence process where Fondo Acción learned more about AGA. Due diligence included consultations with a private company specialized in corporate reputation, strategic communications and crisis management in Colombia.

The process revealed several aspects that later paved the way for the partnership:

- AGA was certified under ISO 14001;
- The company had certified Environmental Management Systems;
- AGA was part of the Global Reporting Initiative; and
- The company was a member of the International Council on Mining and Metals (ICMM, 2001), created to improve sustainable development performance in the mining and metals industry. ICMM members included

> **“The initial approach generated new meetings and a due diligence process where Fondo Acción learned more about the company”**

21 mining and metals companies and 33 national and regional mining associations and global commodity associations.

In November 2009, the Vice President of Sustainable Development and Regulatory Affairs met with Fondo Acción's Board and proposed the creation of an independent fund or account to be managed by Fondo Acción and funded with company resources under its Corporate Social Responsibility Strategy.

This proposal triggered a discussion on reputational risks associated with a formal interaction with a mining company. The Board recommended a site visit to the project area and to other AGA operations in other Latin American countries as well as consultations with other Colombian environmental NGOs. These recommendations were followed by the Fondo Acción team and resulted in a better understanding of the reputational risks by the Board.

The initial partnership was finally approved by the Board in December 2009. Board approval hinged on the following key factors:

- The nature of the proposed independent fund would be aligned with Fondo Acción's mission and would benefit civil society organizations and their initiatives;
- The fund would be entirely funded by AGA and its size would be manageable. A relatively small financial commitment (under US $300.000) would be adequate for a trial phase and would enable the creation of trust between the parties;
- The company's contribution would be part of its Corporate Social and Environmental strategy and budget and would be completely independent of its legal obligations regarding the mining project in the region;
- Governance of the independent fund would be in charge of a technical committee, controlled by Fondo Acción representatives;
- The new fund would operate as an independent account under the procedures established in Fondo Acción's Quality Control System;
- The legal contract between AGA and Fondo Acción would include exit clauses in order to allow the latter to leave in any case of non-compliance by the company; and
- The agreement should enable Fondo Acción to design and implement a careful communications strategy.

The positive evaluation of the results of this first interaction led to two additional collaborations between AGA and Fondo Acción.

4.2 Challenges and future expectations

Fondo Acción has gained valuable lessons and skills through the initiatives conducted in partnership with AngloGold Ashanti. The partnership will continue at least during the life of the two initiatives that are currently under implementation: the Responsible Mining Program and the Strategy for Biodiversity Offsets. New opportunities, particularly in biodiversity offsetting and social development programs, could stem if and when the La Colosa and Gramalote projects are approved and begin implementation.

1. An overview of Bolivia's biodiversity

Bolivia is one of the most biologically and culturally diverse countries of the world maintaining vast, intact humid and dry forest ecosystems with more than 20,000 species of plants (Ibisch & Beck 2003), 45% of all South American bird species (Herzog 2003), 356 species of mammals (Salazar & Emmons 2003) and more than 200 species of amphibians (Reichle 2003). More than 50% of the country is characterized by ecosystems with good or excellent conservation status.

Conservation efforts have evolved rapidly from the first species-protection-laws in the nineteenth century, to the creation of the first national park in the mid-twentieth century, to the implementation of the UN Convention on Biological Diversity (CBD), the formulation of a national biodiversity strategy and action plan, and a current national protected-area-coverage of 16% (Ibisch 2003).

There are, however, severe conflicts with accelerating economic growth and development. Threats in the most sensitive eco-regions (e.g. population shifts from the Andes to the forest lowlands, increasing agricultural activities, growing activities of the oil and gas sector, deforestation, climate change) represent important conservation challenges (Ibisch, P. L. 2005; Ibisch, P. L. & G. Mérida 2004).

The most booming sector is the hydrocarbon industry based on the country's large gas reservoirs. Several pipelines have been built to export the gas, cutting across intact forest ecosystems without road access and therefore opening migration areas.

The management of the Bolivian System of Protected Areas (SNAP) at its different administrative levels is strategically and politically oriented through its Master Plan (SERNAP 2013). It is sustained through the mandate under the Political Constitution of the Plurinational State of Bolivia which recognizes that protected areas are a common good and are part of the country's natural and cultural heritage. Importantly, they accomplish environmental, cultural, social and economic functions for sustainable development (CPE 2009, Art. 385).

The core objective of the Bolivian System of Protected Areas is to maintain representative samples of the bio-geographic provinces. This is done through the implementation of policies, strategies, plans, programs and regulations in order to generate sustainable processes within the protected areas. These processes need to conserve biodiversity and integrate the participation of local populations for the benefit of present and future generations (D.S. 24781, Art. 13). The mission of the Bolivian Service for Protected Areas (SERNAP) is to coordinate the functioning of the Bolivian System of Protected Areas. It guarantees the integral management of the national protected areas in order to conserve biodiversity (D.S. 25158, Art. 3).

Of the 12 ecoregions and 23 sub-ecoregions identified for Bolivia, 11 ecoregions and 19 sub-ecoregions are covered by the 22 national protected areas included in the Bolivian System of Protected Areas. Considering the subnational protected areas as well, 12 ecoregions and 22 sub-ecoregions are covered under the Bolivian System of Protected Areas (Ibisch, P. L. & G. Mérida 2004).

2. Overview of the partners

2.1 FUNDESNAP

FUNDESNAP (the Foundation for the Development of the National System of Protected Areas of Bolivia) is the Bolivian environmental fund. It was established in 2000 to support the National Protected Area System. This includes national, departmental, municipal, and community protected areas, their buffer zones, and other critical ecosystems including corridors and particular landscapes related with the need of special management (e.g., indigenous territories, and climate change mitigation and adaptation).

The fund was originally set up with funding from the Governments of Switzerland and the UK and from the Global Environment Facility (GEF) funds. Since its establishment, it has diversified this financial basis with new funding sources including debt for nature swap and compensation funds. As well as new financial mechanisms, it has also developed extensive experience in capacity building for integral protected area management. This includes buffer zone management because of the requirement that all of Bolivian society has to be involved in FUNDESNAP´s processes.

FUNDESNAP's mission is to contribute to the development and sustainability of the National System of Protected Areas by raising, channelling, and managing financial and non-financial resources for the implementation of programs, projects and activities, integrating the different sectors of Bolivian society.

In order to accomplish this mission, the Fund develop activities linked to all kinds of stakeholders inside and outside protected areas, related with the SNAP. There are four major lines of action:

1. Financial management and engineering;
2. Fundraising and sustainability;
3. Capacity building, knowledge management and setup of cooperation networks; and
4. Setting up and consolidating conservation and sustainable development processes in protected areas and their influence areas.

More specifically, FUNDESNAP's activities include the following:

- Raising and channelling financial and non-financial resources for its investment in operations and projects in national, regional or local protected areas within the framework of public policies for the integrated management of the National System of Protected Areas, and structuring financial systems and mechanisms to support the sustainability of these processes.
- Managing FUNDESNAP and third parties' resources according to the terms and conditions set in the respective agreements, as well as the establishment of trust funds with authorized entities and other legal structures that allow for an efficient and effective achievement of its objectives.
- Strengthening the management capacity of national, departmental and municipal protected areas and special jurisdictions prescribed by law, for the optimum accomplishment of the objectives of the National System of Protected Areas.
- Signing cooperation agreements for sub-grants and co-funding with individuals or organizations, national or international, private or public, whether these entities are centralized or decentralized, for carrying out activities related to the accomplishment of the objectives pursued by the Foundation and maintaining the independence of the Foundation.
- Performing a diversity of technical, economic, financial and legal activities that enable the development of the SNAP and its components, the Foundation's objectives, as well as programs and projects in the main field of its expertise and experience.
- Participate directly or indirectly with or within other public, private, profit or non-profit organizations, providing technical, legal or financial advisory services to third parties.
- Capacity building for key stakeholders in the structuring of groundwork for the sustainability of the diverse processes supported by the Foundation.
- Promotion and support of cooperation networks to foment shared responsibilities among stakeholders for building sustainability of the diverse processes.

2.2 Gas Oriente Boliviano (GOB)

Gas Oriente Boliviano (GOB) owns and operates a part of the gas pipeline to Cuiabá that transports natural gas through country to the border with Brazil. The corresponding Río San Miguel–San Matías tube system connects the San José de Chiquitos Station (at approximately 100 km from the San José de Chiquitos Municipality) to San Matías on the border with Brazil, where it connects to the Gas Ocidente gas pipeline that transports gas to the EPE energy plant in Cuiabá, Mato Grosso, Brazil.

The construction of the gas pipeline started in 1999 and was completed by the end of the following year. Commercial operations began in May 2002. GOB claims that all project aspects including construction, operations and maintenance have met the regulations and standards in place in Bolivia. It has generated numerous documents and agreements indicating that each phase of the project was under continuous supervision, inspection and evaluations (GOB s/d). GOB also claims their important commitment to corporate responsibility and respect for the regions' people and the environment.

Efforts for the environment and the people

The company's aim is to ensure that their presence in the area produces sustainable improvements in the neighbouring communities and that the gas pipeline generates the least possible impact on the sensitive ecosystems.

In addition, the company claims to have helped the indigenous people to reach considerable progress in obtaining land titling for the communal lands and to have supported the training of human resources from the local communities.

Certifications

In early 2006, GOB achieved the Certification for BVQI of its Integrated Management System under the ISO 9001, ISO 14001 and OSHAS 18001 standards, for the transportation of natural gas (GOB 2009). At present, the company is undergoing a re-certification process.

As part of the Integrated Cuiabá Project that includes GOB, Pantanal Energía (EPE) y Gas Ocidente Mato Grosso (GOM), since August 2006 implements a Code of Conduct that establishes the rules for interaction with different stakeholders and institutions in the region (GOB s/d).

Gas pipeline

The gas pipeline is located at 1 meter below the surface in 95% of its 362 km extension and deeper where roads, rails or rivers cross the area. Superficial structures only exist at measuring units and block valves. The tubes have a diameter of 18 inches, made of API 5LX-65 steel with anticorrosive epoxy coating (FBE) and a cathodic protection system, with a capacity of 4 million cubic meters/ day without intermediate compression plants and an

> **“The company’s aim is to ensure that their presence in the area produces sustainable improvements in the neighbouring communities and that the gas pipeline generates the least possible impact on the sensitive ecosystems.”**

allowed maximum pressure of 1440 psi. Under compression, the potential capacity could reach 8 million cubic meters/day. The gas pipeline has 16 main valves with a diameter of 18 inches and 3 lateral valves with a diameter of 4 inches. Twelve automatic actuators are installed in the main valves to cut down the gas flow in case of irregular pressure that could indicate a possible gas leak.

Other installations

The GOB infrastructure also includes:

- The Supervision and Control Centre in Santa Cruz de la Sierra that uses the SCADA Supervisory Control and Data Acquisition System, telemetry and others and allow for permanent real time control; and
- Two measuring units, a gas reception unit at the Chiquitos station and a gas delivery unit at the San Matías station on the Bolivian-Brazilian border. Both units rely on satellite measuring and communication systems through which operational information is sent to Supervision and Control Centre in Santa Cruz de la Sierra.

3. FUNDESNAP’s initiative with GOB

At the end of the 1990´s, Bolivia had entered to a new era with regard to hydrocarbon extractive activities. All prospection and extractive activities were somehow directly related to protected areas. Even if environmental regulations were developed in order to preserve natural heritage, there were no concepts and methodologies in place to link extractive activities in protected areas with compensation or mitigation policies.

The transportation of natural gas from Bolivia to Brazil was required, but it crossed through important critical ecosystems in the highly biodiverse *Chiquitano* region in the south eastern part of Bolivia. Important places such as Tucabaca (regional) and San Matías (national) had recently been established as protected areas and were among the main critical landscapes related to the design of the San Matías-Cuiabá gas pipeline.

Initially, no management of these protected areas was expected in the short term, although SERNAP had identified the need to begin the management of San Matías protected area soon. Even if other hydrocarbon-related Bolivian public agencies were linked to this extractive project and the approval of its construction, legal environmental authorization from SERNAP was required. At this point, the first and most important negotiation between SERNAP, the Vice Ministry of the Environment, and GOB or Eastern Bolivian Gas Company began.

The Vice Ministry of the Environment and GOB were not receptive to the idea to finance San Matías protected area management, even if SERNAP, as public authority for protected areas who was also part of the government sector, was trying to demonstrate the need and responsibility of the company to contribute to the mitigation of environmental impacts along the pipeline to be constructed in one of the biggest protected areas in Bolivia.

After demonstrating the possible impacts of the gas pipeline, the need to set up the management of the San Matías protected area (which was not planned to be funded by the SERNAP yet) to be able to adequately monitor and control the gas pipeline construction and operations, was clearly sustained. The company, under advice from a Bolivian consultant, did not accept to finance all costs regarding San Matías protected area management, but agreed to cover the costs related to the protection and monitoring of the direct influence area of the gas pipeline.

This included the right-of-way of 100 meters along the whole extension of the gas pipeline within the limits of the San Matías Natural Area of Integrated Management. So SERNAP did a quick but technically and financially sustained plan to set up the management of San Matías protected area and also to support its sustainability in time. A two year initial budget of $350,000 and a Trust Fund of $400,000 were proposed to the company as a condition for the approval of the beginning of the gas pipeline construction.[1]

SERNAP based its proposal on SNAP´s experience and projections of the establishment of diverse trust funds in the future that would provide the basis of SNAP´s financial sustainability. Part of this strategy included the establishment of FUNDESNAP and the administration of diverse trust funds.

Building on specific experience with the Integration of the GOB Trust Fund for San Matías protected area as well as with the administration of a portfolio of 8 accounts within the SNAP Trust Fund, FUNDESNAP seeks to foment the establishment of new trust funds/ accounts to be integrated into the SNAP Trust Fund in support of the National System of Protected Areas.

Then, in July 1999, both, the biannual budget to start the management of San Matías protected area, and an endowment trust fund were established through the agreement between SERNAP and GOB in response to negotiations about the San Matías–Cuiabá gas pipeline. A Steering Committee (*Consejo de Cuenta*) was established with the participation of academic institutions, environmental NGOs, SERNAP and FUNDESNAP. This committee is also part of a sustainability strategy envisioned by SERNAP and the company to guarantee transparency and governance of the protected area.

In 2002, the administration of this trust fund was transferred to FUNDESNAP as part of the strategy to give San Matías a basis for its financial sustainability. This endowment fund was initially invested in a Bolivian Bank. By the end of 2005, the Steering Committee for this trust fund (including Noel Kempff National Museum of Natural History, the director of the San Matías protected area, SERNAP, FUNDESNAP and GOB) decided, based on a proposal by FUNDESNAP, to integrate the San Matias endowment as an individual account into the SNAP Trust Fund at international level, administered by FUNDESNAP with its own international financial advisor. Since 2002, the San Matías endowment fund supports 20% of basic financial needs of San Matías, considering that it was supposed to support 5% of the surface of San Matías protected area. Today, FUNDESNAP and SERNAP are searching to increase the San Matías endowment.

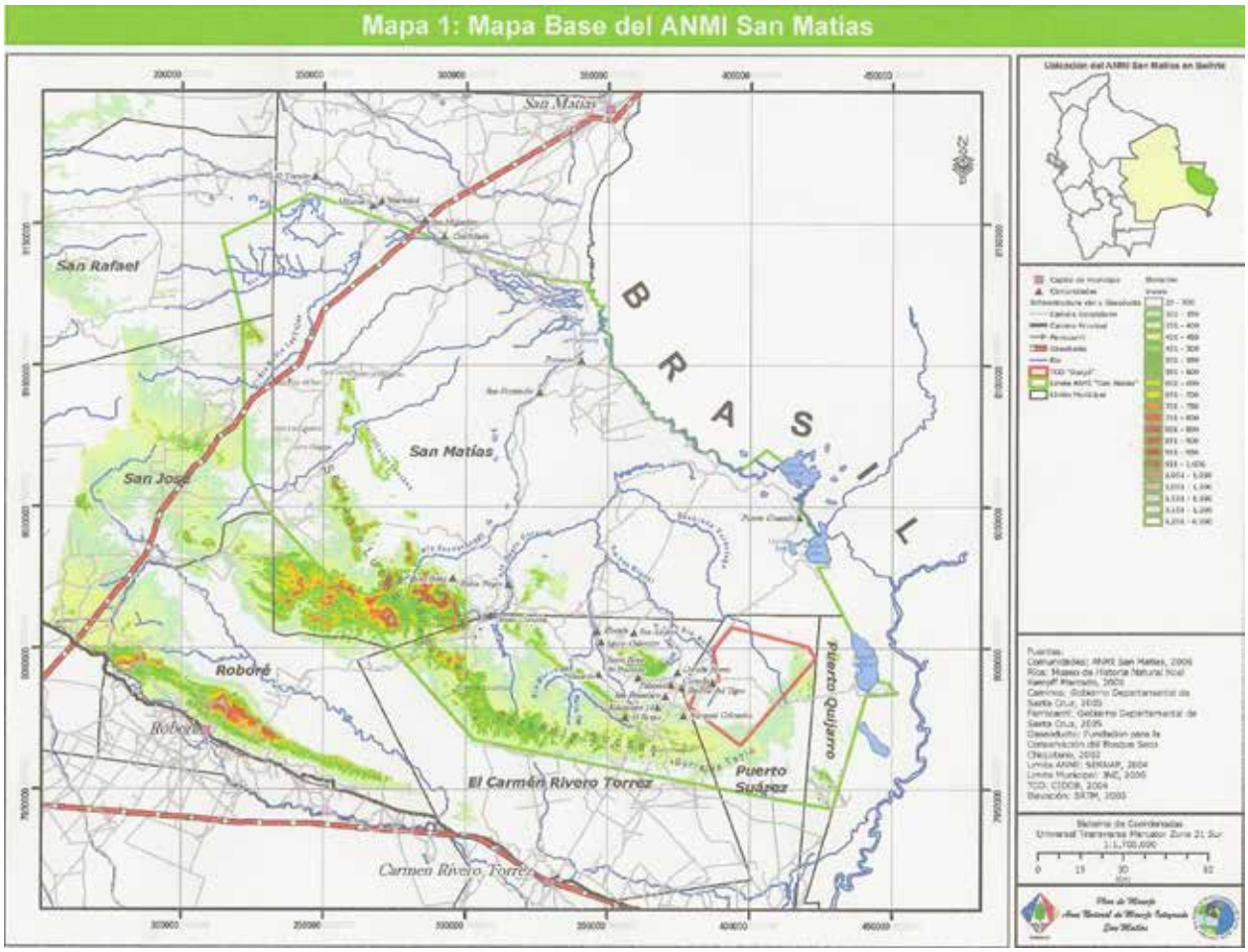
The initial budget was supposed to finance 8 park guards, initial equipment for protection and control and basic training for these personnel. A guard post was also included, as well as general operational costs. The endowment was supposed to partially support the overall budget of San Matías protected area.

3.1 The project location

The project is taking place in the San Matías Natural Area of Integrated Management, the second biggest protected area of the Bolivian National System of Protected Areas.

The San Matías protected area was created in 1997 with an extension of 2,918,500 hectares. Its management is ruled by the legal framework for protected areas. Between 2007 and 2008, the first ten years of participatory management experience in the protected area were translated into its first management plan as the technical document to provide guidelines for protection and conservation, natural resources management and social participation that reflects a broad agreement between protected area authorities and local stakeholders, including indigenous organizations, livestock producers, municipal governments, the departmental government of Santa Cruz and academic and other institutions.

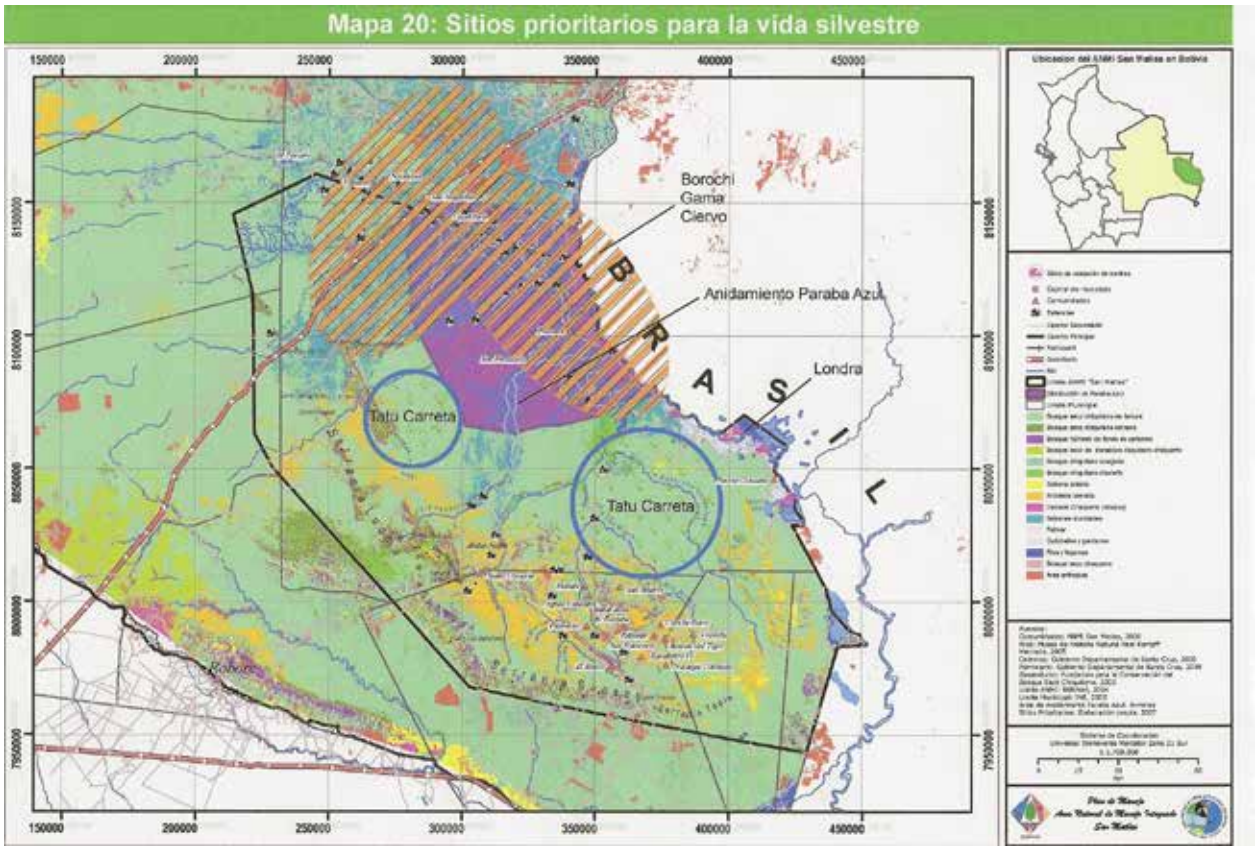
[1] The currency symbol - $ - refers to US Dollars (USD) throughout the case study.



Location of the San Matías Natural Area of Integrated Management
(Source: SERNAP & CG ANMI San Matías 2009)

The objectives for the creation of the San Matías protected area are as follows (Supreme Decree No. 24734, 1997, Art. 3):

1. Conservation of tropical dry forest that cover 50% of the protected area.
2. Conservation of forest ecosystems and deciduous savannah woodlands of the Sunsás and neighbouring mountain stretches not covered by other management categories of the National System of Protected Areas (SNAP). These areas are biogeographically singular; possess important endemism and great landscape beauty.
3. San Matías is a tourist attraction of great value, functioning as a centre of attraction and food source for aquatic birds, the scenic beauty of the great lakes and mountain stretches, as well as an important representation of great mammals, including giant armadillo (Priodontes maximus), marsh deer (Odocoileus dichotomus) and giant otter (Pteronura brasiliensis).
4. Through the neighbouring Pantanal Matogrossense National Park in Brasil, it will offer a fauna and flora connectivity, enhancing the conservation potential of both protected areas for the survival of fauna and biological processes that require large territories, like some greater mammals.
5. Promote the productive activities that follow the policy of sustainable development and help example initiatives that mean no harm to ecosystems and their processes.



San Matías Protected Area Priority Sites for Wildlife Conservation
(Source: SERNAP & CG ANMI San Matías 2009)

San Matías protected area has not been in conflict with hydrocarbon exploration or exploitation directly, but in 2002, the gas pipeline between San Matías and Cuiabá was inaugurated, crossing the north-western part of the protected area, and in 2003, an additional connection was built to provide energy to the neighbouring mining site Don Mario, affecting mainly savannah and to a lesser degree forest ecosystems.

In addition to the direct environmental impacts of the construction and operation of this gas pipeline, including the deforestation along the pipeline and effects on water courses, this pipeline implied the opening of a road of right of way to facilitate maintenance of the tubes but also opens access for other third party users. Other possible impacts are as follows:

- Environmental impacts
  - Deforestation
  - Contamination (water and soil)
  - Reduction of plant populations
  - Increase in hunting pressure on threatened species
  - Degradation of natural resources
  - Extension of the agricultural frontier and timber extraction
- Socio-economic impacts
  - Invasion and growth of communities
  - Invasion of lands

- Migration of people from other regions, increasing the demand on natural resources and introducing new productive schemes and practices
- Mobilization of economic interests that stress pre-existing land tenure conflicts
- Opening of new access roads

A specific project for socio-environmental impact mitigation is being implemented by GOB, the company in charge of the construction and operation of the gas pipeline, issuing six-month reports on the implementation of mitigation measures to the San Matías protected area administration, nevertheless as a result of the gas pipeline construction and operation, illegal timber extraction was detected in the area of the Don Mario mining site, although the access to the pipeline and the right of way has been restricted and controlled by GOB.

3.2 Details of the initiative

The GOB Trust Fund started under the agreement between the SERNAP and GOB on 26 July 1999, on the basis of negotiations over the impacts of the San Matías–Cuiabá gas pipeline to be constructed in the San Matías protected area: the amount of $400,000 was invested in a Trust Fund to benefit the San Matías protected area.

Conservation objectives to be achieved with the GOB Trust Fund

- Contribute to the basic protection of the San Matías protected area, especially in the influence area of the gas pipeline.
- Establish conditions for the implementation of the San Matías protected area's protection plan, especially in the influence area of the gas pipeline.
- Conduct permanent control activities in the influence area of the gas pipeline, especially controlling the direct and indirect impacts of its construction and operations, including the control of incursions, human settlements, and illegal colonization.

Funding Scheme for the GOB Trust Fund

- The GOB Trust Fund was established with a capital of $ 400,000.

Parts involved in the administration and management of the GOB Trust Fund

- Agreement between GOB, SERNAP and FUNDESNAP to assign the administration of the GOB Trust Fund to FUNDESNAP.
- Steering Committee of the GOB Trust Fund: GOB, SERNAP, FUNDESNAP, Noel Kempff Mercado National Museum of Natural History.

Duration

- The GOB Trust Fund has been established with an indefinite duration.

In August 2002, the administration of the resources of the GOB Trust Fund was transferred to the FUNDESNAP after the qualification of proposals presented by different entities specialized in the management of trust funds. In 2005, the corresponding resources were deposited in BISA S.A. Bank and invested in bonds of the Nation's General Treasury and a Fixed Term Deposit.

In December 2005 and in accomplishment of the definition by the board of the Trust Fund that integrates the Noel Kempff Museum of Natural History, the San Matías protected area administration, SERNAP, FUNDESNAP and GOB, the resources were transferred in order to be integrated as a separate account under the Trust Fund for the Bolivian System of Protected Areas, under the administration of FUNDESNAP.

3.3 Linkages to the company's biodiversity impacts

The San Matías-Cuiabá gas pipeline has an overall extension of 645 km, 362 of which are located in Bolivian territory. The gas transported to the EFE energy plant on Cuiabá generates 480 megawatts of energy for the region.

To implement this project, GOB underwent the environmental impact study and environmental licensing process established by Bolivian regulations under Environmental Law (Law No. 1333, 1992). In the Declaration of Environmental Impact (MSDP-VMARNDF-DGICGA-UCIA-DIA No. 966(a)/98, 17.12.1998), the environmental control activities to be developed by GOB during construction and operation of the gas pipeline are established. Operations take place in the framework of

> **"The investment of the company can be considered both responding to environmental mitigation regulations on the one hand and additional measures under the concept of social responsibility on the other hand"**

the Bolivian regulations for the Design, Construction, Operation and Abandonment of Pipelines and the ASME B31.8 regulation under the Bolivian Hydrocarbon Authority.

Bolivia receives 17% of the revenues generated through the gas transportation services which are distributed as follows: 13% VAT (value added tax), 3% transaction tax, 1% SIRESE regulations.

The environmental work of GOB has focused on the conservation and restoration of the right of way along the gas pipeline. A specific project for socio-environmental impact mitigation is being implemented by GOB, the company in charge of the construction and operation of the gas pipeline, issuing six-month reports on the implementation of mitigation measures to the San Matías protected area administration.

In acknowledgement of their obligations with people in the region, the company has supported and funded numerous communitarian works, cultural and environmental activities. In this understanding GOB claims to have generated work opportunities in the influence area of the gas pipeline, including more than 1.700 temporary and permanent local jobs, 94% implemented with Bolivian personnel. The operations of the gas pipeline since 2001 generated another 150 jobs. These activities generated an increasing demand of products and services (transportation) in the region.

Also, GOB claims to contribute to community development in the influence area of the gas pipeline, including infrastructure improvement to mitigate negative impacts of the gas pipeline and investment in communities in the form of Community Relations Plans and Indigenous Development Plans:

- San José de Chiquitos Community Relations Plan: $ 1,152,000. More than 90% have been spent; the remnant will be invested to restore the only Jesuit church in the region.
- San Matías Community Relations Plan: $ 1,497,800. 42% have been spent on infrastructure improvement, the remnant has been invested in a fixed term deposit waiting to fund future projects.
- Indigenous Development Plan: $ 2,162,000 including support to infrastructure, agriculture and cultural projects and land titling processes.
- Part of this contribution was channelled through the Foundation for the Conservation of the Chiquitano Dry Forest (FCBC).

Thus the investment of GOB can be considered both, responding to environmental mitigation regulations established under Bolivian Law on the one hand, part of which has been invested in long-term funding in support of the San Matías protected area management through the GOB Trust Fund, and additional measures under the concept of the Company's social responsibility on the other hand.

3.4 The role of FUNDESNAP

FUNDESNAP, as the environmental fund for protected areas in Bolivia, manages many kinds of funds for protected areas: trust funds, endowments, and program and project funds. This management integrates not only the administration but also capacity building in national government agencies, in regional and local entities, academia, NGOs, indigenous organizations and productive commercial and non-commercial community initiatives.

FUNDESNAP also provides advice to the Bolivian Service of Protected Areas (SERNAP) in financial aspects related to financial mechanisms, fundraising opportunities, fund mobilization processes at international, national and local levels (e.g. technical and financial local platforms) and mainly how to conceive and build financial sustainability for protected areas in Bolivia.

FUNDESNAP is continuously participating in diverse negotiations related to fund mobilization for protected areas and related aspects, together with government agencies or nongovernmental organizations facing diverse kinds of funders and private sector companies and stakeholders.

Our main principles in negotiation are aimed at reaching basis of sustainability, independence, social participation, institutional respect and accountability.

Even if funds or non-financial support are not being channelled through FUNDESNAP, institutional support is offered by the foundation considering its purpose to contribute to the sustainability of protected areas and the Bolivian System of Protected Areas.

Administration is realized through FUNDESNAP's administrative and financial systems. These systems have been reviewed and certified by international donors such as World Bank, Inter-American Development Bank, Swit-

zerland and others. At the same time, they have been approved by national authorities and financial institutions according to Bolivian Law.

Trust Funds are managed by FUNDESNAP at an international level through the Salomon Smith and Barney Bank, with international financial advice from Master Capital S.A., a prestigious Mexican financial institution that advises many other environmental funds in Latin America and the Caribbean.

The main accounts related to trust funds for the Bolivian System of Protected Areas are managed at this level. 10% of the endowments are donations from private companies, 90% come from bilateral and multilateral donors for the SNAP through FUNDESNAP.

FUNDESNAP in its model to manage trust funds is part of diverse Steering Committees for endowments. This is the case of GOB. These Committees are the main mechanism to ensure accountability and transparency, and they are crucial to integrate Bolivian society into the financial management of SNAP´s funds.

In the case of GOB, funds are annually transferred to San Matías protected area on the basis of the Annual Operative Planning and Budget, approved by the Steering Committee, as established in the Agreement signed between SERNAP, FUNDESNAP and GOB.

FUNDESNAP has to ensure the transfer of a minimum amount of resources reached by revenues of the endowment, and then monitor the use of these resources through financial, administrative and technical monitoring and evaluation systems.

Although FUNDESNAP channels 20% of San Matías protected area overall budget through funds coming from GOB, and an additional 20% coming from another endowment managed by FUNDESNAP (SNAP´s Trust Fund) the overall funding for San Matías continue being deficient to cover the most important requirements of the protected area. This is why FUNDESNAP also contributes to Strategic Financial Planning. Even if there is a Financial Plan 2005 – 2015 of the SNAP that includes San Matías, it was necessary to update this financial plan in the process of the participatory design of the protected area's management plan.

FUNDESNAP has identified the need of an endowment of up to $ 3 million for San Matías. This constitutes the basis for a complementary fundraising process to be developed by FUNDESNAP under the leadership of SERNAP and GOB.

4. History of the partnership and future scenarios

GOB has approached SERNAP in order to accomplish legal requirements for the gas pipeline construction and due to the need to establish a financial mechanism; FUNDESNAP has been contacted by SERNAP and integrated into the design and administration of the GOB trust fund. Also, FUNDESNAP has contributed with important considerations for the negotiation and establishment not only of the endowment, but also through the Steering Committee and the treatment of financial and technical considerations in the San Matías protected area management, seeking to mainstream the purpose to gradually reach financial sustainability.

4.1 Main factors that made the partnership possible

The model SERNAP-GOB-FUNDESNAP is a sound combination of institutions and roles. The need of an efficient and accountable institution that guarantees transparency in the administration, but also pro-activity to help public-private-partnerships was the main factors to make this partnership possible.

FUNDESNAP is considered not only as an administrator but mainly as a facilitator in the relationship between the government, private companies and civil society. Due to its experience not only in financial matters but also in protected areas topics, FUNDESNAP at times had the chance to contribute the notion that the public authorities have the role to maintain the "institutional memory" and the continuity of public policy and interests. This is very important for both institutions, GOB and SERNAP. FUNDESNAP's position is not competitive but respectful towards the role and responsibility of NGOs and other stakeholders.

According to its specific role and capacity, FUNDESNAP also contributes to other kinds of negotiations that help SERNAP and GOB, as well as searching for financial complementariness with other donors and stakeholders.

4.2 Detailed results

The overall financing system of San Matías protected area is composed as follows:

- Yields of the SNAP Trust Fund (administered by FUNDESNAP);
- Yields of the GOB Trust Fund;
- Program and Project funds not directly channelled through SERNAP, including the Araucaria Program/ Spanish International Cooperation (AECID), WWF, Noel Kempff Museum of Natural History and others; and
- Own resources generated through fines for infringements.

According to the San Matías protected area management plan (SERNAP & CG ANMI San Matías 2009), the general budget for the protected area reached between 110.000,00 and $190,000 annually, covering the minimum stable protected area personnel since 2000, including a director, an administrator, a head of park guards and 8 park guards. It eventually covered legal consultants and, since 2004, an environmental education and social participation consultant. Due to the great distance and difficult access to the protected area, great chunks of the budget cover operating costs.

As a technical and financial add up to this basic budget, the San Matías protected area mainly relied on two important funding sources, WWF and the Araucaria Program with support from the Spanish International Cooperation (AECID).

The evolution of the GOB Trust Fund under the administration of FUNDESNAP has allowed responding to SERNAP's financial requirements by generating timely disbursements on the basis of the GOB Trust Fund's yields to – partially – cover the annual protected area budget scheduled by the Bolivian Service for Protected Areas, including the San Matías protected area.

For San Matías protected area, based on the yields of the GOB Trust Fund, FUNDESNAP has realized the following disbursements:

Fiscal Year	Amount transferred via SERNAP to San Matías protected area ($)
2002	30,000 (deduced from the initial capital of 400,000)
2003 – 2010	Possible annual deduction from capital: 5,000
2010	23,400
2011	23,400
2012	23,400
2013	23,400

These disbursements are assigned to the implementation of scheduled activities under the annual operational planning conducted by the Bolivian Service for Protected Areas (SERNAP).

4.3 Main challenges and future expectations

The challenges identified for San Matías are representative challenges for almost every protected area of national interest of the Bolivian SNAP – financial sustainability. Even if we can say that there has been important progress regarding sustainability in national protected areas, almost 50% of the funding still depends on international cooperation. Public financing has increased substantially, but is not yet enough (covering only 12% of the overall SNAP budget).

San Matías can rely on the support of a specific endowment (GOB) and the endowment for the SNAP that additionally supports its annual budget. Six of the 22 protected areas of international interest have their specific endowment (San Matías, Otuquis, Pilón Lajas, Madidi, Noel Kempff Mercado and Kaa Iya), and 14 are supported by SNAP´s endowment (also administered by FUNDESNAP).

The major challenge for San Matías is to increase its endowment fund at least to a range of $3 million for a basic management scenario or to a range of $7 million for an integral management scenario.

FUNDESNAP together with SERNAP is trying to establish a technical and financial platform that integrates possible local, national and international donors in order to reach not only endowment needs but mainly to support what is established in its management plan. GOB has been invited to contribute to financial sustainability of San Matías protected area by increasing the endowment or by sharing its experience to other entities in the sector and thus motivate the investment of possible other donors.

Also, the GOB is coordinating closely with SERNAP and FUNDESNAP and is planning to increase their support to San Matías protected area through its Social Company Responsibility program as a way to strengthen public-private-partnerships. FUNDESNAP is encouraging SERNAP to conduct strong fundraising campaigns at a local, national and international level, considering the global and local importance of this highly biodiverse protected area.

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Conclusions

The Extractive Industries Workshop explored opportunities for environmental funds in Africa to engage with the sector and to secure increase funding for biodiversity conservation.

1. FDI & Extractive Industries in Africa

The workshop started with a recognition that extractive industries are active throughout the continent and that their operations are in many cases being financed by foreign direct investment (FDI). Observations from the participants included the following:

- **Benin** - Mining is an emergent market
- **Botswana** - Diamond mining for exports and also coal for energy
- **Cameroon -** Oil, mining and forestry are the main sectors with mining investments from UK and Australia
- **Democratic Republic of Congo (DRC) -** Mining and hydroelectric plants with investments from Canada, China, the UK and USA including the possibility of oil drilling in protected areas such as Virunga
- **Gabon -** Mainly energy and oil investments with FDI coming from France, UK, Australia, China, France and the UK, and with Belgium and Singapore investing in agribusiness
- **Ivory Coast -** Mining, energy and oil with FDI in these sectors seen by the government as the way for the country to be an emerging economy by 2020
- **Madagascar** - Mainly mining with investments following international standards from Australia, Canada and Japan, Australia and with investments from others like China that do not follow these standards

- **Malawi** - Government has prioritised mining in recent years with oil found near the Tanzanian boarder and with increases in FDI from other African countries, China, Japan, the UK, and USA and African countries
- **Mauritania -** Offshore oil within marine protected areas with investments coming from Australia, Canada and the UK, and also a fishing agreement with the EU
- **South Africa -** Mining is a major sector attracting high levels of FDI
- **Swaziland -** Forestry and sugar-cane are the main sectors, but in the last three years new iron and coal mining with investments from India and South Africa
- **Tanzania -** Mining is growing with a major reserve of uranium and recently found oil and gas offshore
- **Uganda -** Agriculture and mining are the main economic sectors as well as hydro and thermo energy with oil extraction in protected areas seen as a way to development

Extractive industries – mining, oil and gas – are present throughout Africa, In many cases, host governments are actively encouraging investments as a path to increase fiscal revenues and economic development. Especially where there is a political imperative to undertake resource extractive activities, environmental funds in Africa need to explore ways to engage and indeed influence these developments.

The workshop first focused on key international standards and commitments which may influence corporate responses to their biodiversity responsibility. In this respect, one of the key drivers for strengthening biodiversity responsibility in the extractives sector is Performance Standard 6 (PS6) of the International Finance Corporation (IFC), the private sector lending arm of the World Bank Group. IFC PS6 is important not only for its substance but for its role in international finance decision-making as set out in the following sections.

2. OECD Common Approaches, Equator Principles & IFC Standards

A recent and critically important development in international finance policy is the adoption of the OCED Common Approaches. OECD members are traditionally developed countries, but in recent years emerging economies such as Brazil, Mexico and South Korea have also become members. The OECD serves as a type of policy think tank and develops common policies and frameworks for its members.

The OECD Common Approaches are aimed at the Export Credit Agencies (ECAs), which are public or quasi-public financial intermediaries of FDI. They set out the environmental and social due diligence which an ECA must undertake before backing a foreign commercial project. Importantly, the approaches are based on the World Bank Safeguards Policies and the IFC Performance Standards (PSs). For commercial investments in extractives projects in Africa, the IFC PSs are particularly relevant.

A number of years ago, the world's major investment banks also agreed on an approach to environmental and social responsibility in their lending practices. More than a hundred large banks have adopted the Equator Principles which are also based on the IFC PSs. Banks who have signed up to the Equator Principles commit to addressing environmental and social issues in their lending decisions.

The current draft of IFC Performance Standards on Environmental and Social Sustainability was adopted in 2012 after an extensive worldwide consultation process. They are 8 Standards and for each there are detailed Guidance Notes. Every extractive project in Africa financed by investment banks or backed up by ECAs will have to follow the IFC Standards.

IFC Performance Standards

PS1	Assessment and Management of Environmental and Social Risks and Impacts
PS2	Labour and Working Conditions
PS3	Resource Efficiency and Pollution Prevention
PS4	Community Health, Safety, and Security Performance
PS5	Land Acquisition and Involuntary Resettlement Performance
PS6	Biodiversity Conservation and Sustainable Management of Living Natural Resources
PS7	Indigenous Peoples
PS8	Cultural Heritage

As discussed further below, Performance Standard 6 (PS6) specifically addresses biodiversity. However, biodiversity has relevance to the other standards as well. As the participant from FEDEC noted, in the case of the Chad-Cameroon gas pipeline, the company dedicated resources to a biodiversity compensation project, because they needed to follow IFC Standards. For the company, Exxon-Mobile, the IFC Standards provided them with a level of accountability and governance they needed to work with their host governments, international NGOs and local communities. In this case, an environmental fund was established to manage the compensation.

The workshop also noted that IFC Standards have some shortcomings. For example, they focus on environmental and social issues as an investment risk rather than a sustainable development opportunity. Also, the emphasis is clearly on construction phase impacts and to a lesser extent on operational impacts. The Standards say little about the impacts of decommissioning and closure.

Nevertheless, the IFC Standards are potentially powerful tools for environmental funds and other stakeholders to use when engaging with extractive industries. As they have been adopted by the ECAs and by private investment banks, through the OECD Common Approaches and the Equator Principles respectively, they provide a lever to help ensure that FDI for extractive projects is biodiversity responsible.

In addition to the IFC PSs, there are other international commitments which may be provide an basis for constructive engagement with an extractives project on biodiversity. There include the principles of the UN Global Compact, the International Council for Mining and Minerals (ICMM) and IPEACA, the environmental body of the petroleum industry.

The participants noted that the new standards of the IFC and those currently under development by the World Bank may help to improve performance on the ground. However, there is a need to establish a capacity to ensure that these standards actually deliver results. For example, an environmental fund in the Chad-Cameroon project has managed environmental compensation for two national parks.

Importantly, however, revenues of an extractive project are taxed by the host government and environmental funds can work to ensure part of these revenues are used locally and not just flow to the capital city. EFs can help lobbying for part of the revenues to be earmarked to be spent locally. In Africa, however, perhaps the greatest problem is corruption. What constraints can these international standards impose on host governments? Standards alone may be insufficient.

Mozambique is a good example of these challenges. Will the large scale investments in gas in the far north lead to increase corruption in the capital city in the far south? Can the investors pressure the government to increase transparency and accountability? If the government does not, will standards-based FDI flow into the country?

In the case of Swaziland, in response to economic crisis, the government fast-tracked a mining project without proper environmental impact assessment. Now the project is in its operations phase and a lot of damages are being observed. Because of politics it is now very hard to make the company responsible for the damages.

Because extractives projects are significant revenue generators, they are accepted by some governments. However, these international standards may provide us an additional layer of influence, even if the project is already in the operations phase, because these projects have long-term lifecycles. Even in cases like Swaziland, there is always an opportunity to engage at some time. EFs can have a long-term perspective on an extractives projects and focus on engagement for the long term.

3. IFC Performance Standard 6

IFC PS6 focuses "Biodiversity Conservation and Sustainable Management of Living Natural Resources." It aims to ensure that investments in commercial projects, such as mining operations, address the following objectives:

- To protect and conserve biodiversity;
- To maintain the benefits from ecosystem services; and
- To promote the sustainable management of living natural resources through the adoption of practices that integrate conservation needs and development priorities.

This requires that biodiversity issues such as protected areas, critical habitats, endangered and invasive species, and ecosystem services are integrated into the project's environmental and social management system. This system includes impact assessment, mitigation measures, monitoring and adaptive management.

For environmental funds, the essence of PS6 is set out in paragraph 7 which reads as follows:

> *7. As a matter of priority, the client should seek to avoid impacts on biodiversity and ecosystem services. When avoidance of impacts is not possible, measures to minimize impacts and restore biodiversity and ecosystem services should be implemented. Given the complexity in predicting project impacts on biodiversity and ecosystem services over the long term, the client should adopt a practice of adaptive management in which the implementation of mitigation and management measures are responsive to changing conditions and the results of monitoring throughout the project's lifecycle.*

This paragraph includes several key concepts including avoid, minimize, restore, adaptive management, and lifecycle. Two other important key concepts are presented in in the first sentence of paragraph 10:

> *10. For the protection and conservation of biodiversity, the mitigation hierarchy includes biodiversity offsets, which may be considered only after appropriate avoidance, minimization, and restoration measures have been applied.*

These are mitigation hierarchy and biodiversity offsets. The mitigation hierarchy is set out in PS1 and in PS6 it is applied to biodiversity as follows:

Biodiversity Mitigation Hierarchy

Avoid
Minimise
Restore
Offset

through adaptive management
over the project's lifecycle

For environmental funds, these four steps provide a framework for engaging an extractives project with respect to mitigating its impacts on biodiversity. It further opens up opportunities for using environmental funds to finance biodiversity conservation in the context of the companies decisions to avoid critical areas, minimise its biodiversity footprint, restore impacted areas, and, if needed to ensure an overall positive impact, offset.

Further, as made clear in paragraph 7, the mitigation needs to be for the lifecycle of the project from planning to construction to operations to decommissioning and closure. And the management of mitigation measures needs to be adaptive. This implies a long term view and commitment by the project to biodiversity conservation in which environmental funds as long-term funding mechanisms could play a vital role.

With respect to IFC PS6, the workshop identified a number of ways in which environmental funds (EFs) could engage. These include the following:

- EFs are positioned to secure finance for conservation from other organizations and have a high level of trust in terms of disbursing this money;
- EFs are considered sustainable organization vis-a-vis other NGOs and thus can have long-term, life-cycle relationships with an extractive companies;
- EFs can ensure high standards on funds expenditures and reporting in terms of national regulations and international best-practice;
- EFs can underwrite a network of organizations to enable a range of different stakeholders can interact and engage with the company;
- EFs can play a direct role in compliance though mitigation measures that result from environmental and social assessment;
- EFs can contribute to capacity building of local stakeholders to strengthen their engagement with the company;
- EFs can contribute to communicating relevant information to local stakeholders;
- EFs can manage an emergency fund to be used in case of unexpected problems arising from an extractive project;
- EFs focus on nature conservation and thus can address all four mitigation steps – avoid, minimise, restore, and offset;
- EFs can help implement the company's environmental and social management plan; and
- EFs have accountable governance structures and generally are independent from both the government and the private sector.

4. Other Key Conservation Tools for the Extractives Sector

EFs can engage with extractive companies to help them identify biodiversity impacts and implement biodiversity-related mitigation measures through the lifecycle of a project. This includes biodiversity responsibility in and around the project site. It can also include biodiversity-related corporate social responsibility programmes which may in part be compensation for impacts on biodiversity and ecosystem services on which local communities may depend.

In addition to the IFC PSs and their role in foreign investments in extractive industries, there are several other tools which the EFs may want to use. These include the following:

- IPIECA Managing Biodiversity Impacts
- ICMM Good Practice Guidance for Mining and Biodiversity

- WBCSD WRI Corporate Ecosystem Services Review
- IPIECA Ecosystem Services Guidance
- ICMM IUCN Biodiversity Offsets
- BBOP Standard on Biodiversity Offsets
- Verified Conservation Area (VCA) Standard
- CSBI Timeline Tool

One of more of these tools may provide EFs with 'a foot in the door' to engage with an extractives company. For example, the ICMM principles emphasise taking a lifecycle approach. The CSBI timeline tool helps to link financing flows to biodiversity commitments over the lifecycle of the project.

Many international companies are members of WBCSD and so using one of their guidelines may be appealing to them. Likewise, a number of extractive companies have been involved with BBOP and may appreciated using their detailed guidance for undertaking an offset. For a broader landscape approach which address all the steps of the mitigation hierarchy, the VCA Standard may be of use.

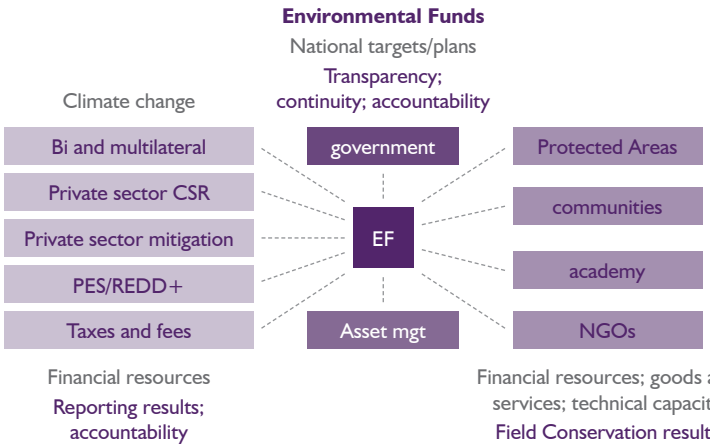
As many companies are adopting the ISO 14001 standard for environmental management systems, it may be useful to explore how this standard can address biodiversity issues. Also, when it comes to monitoring and reporting, adherence to the biodiversity reporting guidelines of the Global Reporting Initiative could help companies to communicate their efforts to key stakeholders.

5. Drivers at the National Level in Africa

Innovation in biodiversity finance at the national level may also provide new opportunities for engaging with extractive industries. These are in part reflected in the CBD Resource Mobilisation Strategy. This Strategy was approved in 2008 at CBD COP9 in Bonn and in 2010 linked the Aichi Target 20 on resource mobilisation. Goal 4 sets out priority areas for developing innovative financial mechanisms as follows:

> **Goal 4: Explore new and innovative financial mechanisms at all levels with a view to increasing funding to support the three objectives of the Convention**
>
> *4.1. To promote, where applicable, schemes for **payment for ecosystem services**, consistent and in harmony with the Convention and other relevant international obligations.*
>
> *4.2. To consider **biodiversity offset mechanisms** where relevant and appropriate while ensuring that they are not used to undermine unique components of biodiversity.*
>
> *4.3. To explore opportunities presented by **environmental fiscal reforms** including innovative taxation models and fiscal incentives for achieving the three objectives of the Convention.*
>
> *4.4. To explore opportunities presented by promising innovative financial mechanisms such as **markets for green products**, **business-biodiversity partnerships** and **new forms of charity**.*
>
> *4.5. To integrate biological diversity and its associated ecosystem services in the development of new and **innovative sources of international development finance**, taking into account conservation costs.*
>
> *4.6. To encourage the Parties to United Nations Framework Convention on Climate Change and its Kyoto Protocol to take into account biodiversity when developing any **funding mechanisms for climate change**.*

Innovative mechanisms at the national level, such as payments for ecosystem services, biodiversity offsets, business and biodiversity partnerships, and new forms of charity have potential for use with the extractives sector. The following image shows how such financing mechanisms in turn link to EFs:



One specific opportunity is to ensure that biodiversity responsibility is embedded in a mining agreement. In such an agreement, it could be possible to ensure that some of the revenues generated by an extractives project are earmarked explicitly for biodiversity mitigation including offsets or for payments for ecosystem services or for corporate support to biodiversity conservation priorities within the broader landscape or country.

Ultimately the rights and responsibilities for extractive industries – mining, oil and gas – are set by the State. Thus a contractual mining agreement can play a critical role in determining what, if any, resources generated by the extractive operations can be earmarked for conservation. Key issues in this regard include the following:

- Transparency from the State in publishing the licensing agreements signed with the companies;
- Legal capacity in the EFs to understand these contracts and identify spaces within them to engage; and
- Exit clauses in related agreements signed between companies and the EFs.

6. Insights from African & International Case Studies

A considerable amount of time in the workshop was devoted to presenting and exploring various case studies including the following:

- **Balhaf Harbour** – coral reef protection and a fish sanctuary at an industrial port set up and managed by Yemen LNG including a public Biodiversity Action Plan
- **Black Sea** – plans underway by South Stream Offshore Pipeline to run four gas pipelines from Russia across the Black Sea through Turkish waters to Bulgaria and establishing an IFC-compliant environmental and social management system
- **Cabo Delgado Province** - a large gas development by Anadarko and ENI in the far north of Mozambique with a transparent process for public comment on its environmental and social impact assessment
- **Chad-Cameroon Pipeline** – one of the first extractive industry cases for establishing an environment fund, the Foundation for Environment and Development in Cameroon (FEDEC), to compensate for impacts by supporting two national parks
- **Coello River Basin** – a mining site of AngloGold Ashanti in Colombia supported by a fund managed by Fondo Accion to promote sound environmental management of water resources for the benefit of the local communities
- **Haller Park** – a unique nature reserve just north of Mombasa, Kenya, which was once a limestone quarry restored and managed the Lafarge's Bamburi Cement Limited
- **Kilembe Copper Mine** – next to the Ruwenzori National Park in Uganda and recently reopened, but managed for years after closure as a housing estate
- **KwaZulu-Natal North Coast** – long-term dune mining restoration activities in South Africa by Richards Bay Minerals with community engagement
- **Lake Albert Rift Basin** – plans underway in Uganda to establish a national conservation fund from revenues generated from the oil developments in this area including participation of the oil companies such as Total and Tullow and development assistance agencies such as AFD and USAID
- **Mbalam-Nabeba Iron Ore Project** – an iron ore mining project by Sundance Resources in the southeast of Cameron with a dedicated conservation concession to which could be managed by a specific or a national conservation fund
- **Mount Mulanje** – a unique biodiversity site in Malawi which is threatened by two potential mining operations and the lack of transparency and public accountability with regard to these operations
- **Mount Nimba** – a private-public partnership with an Indian to mine iron ore in a World Heritage site in far west of the Ivory Coast which was halted after pressure from the Foundation for National Parks and Reserves

- **Ngwenya Mine** – a recently reopened mine in a protected area in the north of Swaziland that has been challenged by the Swaziland Environmental Fund as having had an inadequate environmental and social impact assessment resulting in subsequent serious impacts including water contamination
- **Niger Delta Biodiversity Project** – a UNDP/GEF project to mainstream biodiversity responsibility into the oil and gas sector in Nigeria with the possibility of establishing a large Niger Delta Biodiversity Trust Fund to help mitigate the extensive environmental and social impacts of the industry
- **San Matias Natural Area of Integrated Management** – supported by an environment fund mandated by the Government of Bolivia, financed by the Gas Oriente Boliviano pipeline and managed by FUNDESNAP to support the protected area
- **Virungu National Park** – a prospecting concession by London-based SOCO in this DRC World Heritage site lead to a major campaign by WWF to block any mining in the park resulting in the oil becoming a stranded asset and plans for other economic activities in the park to compensate for the loss of the mining revenues

These cases highlighted both the opportunities for engaging with extractive industries and also the serious challenges of both engaging and not engaging with this sector. For example, the challenges of engaging with the oil and gas sector in the Niger Delta need to be contrasted to the critical situation on the ground where much of the natural environment is seriously degraded and local livelihoods are on a terrible state.

Regarding establishment of trust fund for the Niger Delta, there is a need to understand the role of the government in both the current status of the area and in any solution. As the oil and gas companies operating in the Niger Delta can realize the lack of capacity of the state to manage biodiversity in this region, it is likely that they might support an independent trust fund.

However, the government, if it is minimally responsible for the current situation, would also have to accept this fund. This is especially important as the government though the Nigerian National Petroleum Corporation owns at least 55% of every oil and gas project in the Delta. This means that the government must also support and finance an independent biodiversity trust fund.

7. What is to be Done?

The closing sessions of the workshop focused on identifying common issues that EFs face with respect the extractive industries, strategies which need to be pursued, and capacities which need to be strengthened. These included the following points:

Common Issues among EFs in Africa

- Political interference in mining deals
- Inadequate capacity of the stakeholders
- Lack of transparency
- Limited resources or capital
- Limited funding opportunities or fair business practices
- Lack of EF readiness to discuss key issue
- Need to be considered as a key player in contracting extractive projects
- Distance of national parks compared to mining site
- Working with mining issues and challenges around and inside parks

Strategies EF's may Adopt

- To understand the roles and responsibilities of extractive industries
- To strengthen capacities by establishing networks and partnerships
- To be knowledgeable on international standards and national legal issues
- To engage extractive companies in environmental issues as part of their CSR
- To have business intelligence on FDI, where is coming from and where it is going
- To build on EFs' credibility with governments and other stakeholders
- To position EFs as the state's partner with respect to extractive industries
- To secure licensing contracts for mining with clauses to fund EFs
- To define the composition of financing over the lifecycle of the project

Capacities/Conditions to have in Place

- Building confidence to engage with large, international corporations
- Political will
- Experience sharing among the CAFÉ network members
- Analysis of environmental and social standards and management systems
- Analysis of CSR and the norms and principles adopted by companies
- Developed ability to advocate for EFS to be including in mining contracts
- Enhanced lobbying and negotiating capacity

In the last round of comments, it was clear that extractive industries are a potential source of funding for bio-diversity conservation. Nevertheless, one participant wisely reminded the participants that "He who sups with the Devil should have a long spoon." The long spoon for environmental funds in Africa is IFC PS6.

Glossary

This section provides a list of key terms and their definitions used in this workshop. Terms used within the conservation community can at times be confusing or unclear. For example, the word 'biodiversity' has multiple different meanings in common usage. General agreement on the meaning of terms is critical to ensure clarity among all stakeholders.

Adaptive Management - A systematic process of continually improving management policies and practices by learning from the outcomes of existing programmes. (IUCN)

Baseline Assessment - A baseline is the starting point (a certain date or state) against which the changes in the condition of a variable or set of variables are measured. An assessment comprises the analysis and review of information derived from research for the purpose of helping someone in a position of responsibility to evaluate possible actions, or think about a problem. Assessment means assembling, summarizing, organizing, interpreting, and possibly reconciling pieces of existing knowledge, and communicating them so that they are relevant and helpful to an intelligent but inexpert decision-maker. (CBD SBSSTA9)

Biodiversity (or Biological Diversity) - The variability among living organisms from all sources including, inter alia, terrestrial, marine and other aquatic ecosystems and the ecological complexes of which they are part; this includes diversity within species, between species and of ecosystems. (CBD)

Biodiversity Positive (or BioPositive) - An attribute of a VCA management system, plan or action which results in improvement in the status of the area's biodiversity in terms of conservation or sustainable use. (GDI)

Biological Resources - Includes genetic resources, organisms or parts thereof, populations, or any other biotic component of ecosystems with actual or potential use or value for humanity. (CBD)

Consensus - General agreement, characterised by the absence of sustained opposition to substantial issues by any important part of the concerned interests. (ISEAL)

Conservation – Conservation is… the management of human use of the biosphere so that it may yield the greatest sustainable benefit to present generations while maintaining its potential to meet the needs and aspirations of future generations. Thus conservation is positive, embracing preservation, maintenance, sustainable utilization, restoration, and enhancement of the natural environment. (IUCN WCS)

Domesticated or Cultivated Species - Species in which the evolutionary process has been influenced by humans to meet their needs. (CBD)

Dryland - Arid, semi-arid and dry sub-humid areas, other than polar and sub-polar regions, in which the ratio of annual precipitation to potential evapotranspiration falls within the range from 0.05 to 0.65. (UNCCD)

Dutch Disease – Decline in economic performance of other sectors following the discovery of a valuable natural resource. Declines are caused through transfer of capacity resources between sectors and loss of competitive edge due to appreciation of local currency value. The term was originally coined by the Economist magazine in 1977 to describe the decline of the manufacturing sector following the discovery of natural gas reserves. (Gould and Kapadia, University of Michigan)

Ecoregion - A large unit of land or water containing a geographically distinct assemblage of species, natural communities, and environmental conditions. (WWF)

Ecosystem - A dynamic complex of plant, animal and micro-organism communities and their non-living environment interacting as a functional unit. (CBD)

Ex-Situ Conservation - Conservation of components of biological diversity outside their natural habitats. (CBD)

Genetic Material - Any material of plant, animal, microbial or other origin containing functional units of heredity. (CBD)

Genetic Resources - Genetic material of actual or potential value. (CBD)

Habitat - The place or type of site where an organism or population naturally occurs. (CBD)

Hectare - The basic unit of area in defining VCAs, equivalent to 10,000m^2.

High Conservation Values (HCVs) - Encompass the whole scale from species to landscape, and include exceptional or critical ecological attributes, ecosystem services and social functions. (HCV Resource Network)

Indicator – A measure or metric based on verifiable data that conveys information about more than itself. (Biodiversity Indicators Partnership)

In-Situ Conservation - The conservation of ecosystems and natural habitats and the maintenance and recovery of viable populations of species in their natural surroundings and, in the case of domesticated or cultivated species, in the surroundings where they have developed their distinctive properties. (CBD)

Invasive Alien Species - Alien species that become invasive are considered to be a main direct driver of biodiversity loss across the globe. (Global Invasive Species Programme)

Landscapes - A geographical mosaic composed of interacting ecosystems resulting from the influence of geological, topographical, soil, climatic, biotic and human interactions in a given area. (IUCN, related to the CBD concept of 'ecological complexes' in its definition of biodiversity)

Manager - The agent – individual, communal, corporate or public – with clearly recognised legal or customary rights and responsibilities to manage a VCA; also called a Management Authority. (VCA)

Measure - A standard unit used to express size, amount or degree. (Biodiversity Indicators Partnership)

Metric - A system or standard of measurement. (Biodiversity Indicators Partnership)

Mitigation Hierarchy – Avoidance, then Minimisation, then Restoration of environmental damage. Offsets and Compensation are implemented for unavoidable permanent impacts. (IFC PS6)

> **Avoidance**: Measures taken to avoid creating impacts from the outset, such as careful spatial or temporal placement of elements of infrastructure, in order to completely avoid impacts on certain components of biodiversity. This results in a change to a 'business as usual' approach.
>
> **Minimisation**: Measures taken to reduce the duration, intensity and/or extent of impacts that cannot be completely avoided, as far as is practically feasible.
>
> **Rehabilitation/Restoration**: Measures taken to rehabilitate degraded ecosystems or restore cleared ecosystems following exposure to impacts that cannot be completely avoided and/or minimised.
>
> **Compensation or Offset**: Measures taken to compensate for any residual significant, adverse impacts that cannot be avoided, minimised and/or rehabilitated or restored, Measures to achieve no net loss or a net gain of biodiversity for at least as long as the project's impacts are biodiversity offsets. Offsets can take the form of positive management interventions such as restoration of degraded habitat, arrested degradation or averted risk, where there is imminent or projected loss of biodiversity. Measures that address residual impacts but are not quantified to achieve no net loss or not secured for the long term are compensation, otherwise known as compensatory mitigation. (BBOP, RedLAC)

Natural Capital – Land, air, water, living organisms and all formations of the Earth's biosphere that provide us with ecosystem goods and services imperative for survival and well-being. Furthermore, it is the basis for all human economic activity. (IISD)

Protected Area - A geographically defined area which is designated or regulated and managed to achieve specific conservation objectives. (CBD)

Resource Curse – Stagnation and sometimes negative economic growth for countries with an abundance of natural resources. Tends to occur where there are aggressive rent seeking groups resulting in unfair negotiation with governments and communities, government corruption and lack of political freedom, weak fiscal policy, and leakages – often arising from corrupt government infrastructure allowing revenues to leave the country. (Hague Institute for Global Justice)

SMART Objectives & Targets – Specific, Measureable, Achievable, Relevant, Time-bound. (Peter Drucker)

Stakeholders - Persons, groups or institutions with interests in a project or programme. Primary stakeholders are those ultimately affected, either positively (beneficiaries) or negatively (for example, those involuntarily resettled) Secondary stakeholders are the intermediaries in the aid delivery process. (FAO)

Standard - A document that provides for common and repeated use, rules, guidelines or characteristics for products or related processes and production methods, with which compliance is not mandatory. (WTO)

Sustainable Development - Development that meets the needs of the present without compromising the ability of future generations to meet their own needs. It contains within it two key concepts: the concept of needs, in particular the essential needs of the world's poor, to which overriding priority should be given; and the idea of limitations imposed by the state of technology and social organization on the environment's ability to meet present and future needs. (Bruntland Report)

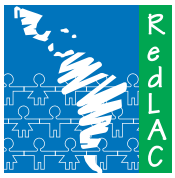
Sustainable Use - The use of components of biological diversity in a way and at a rate that does not lead to the long-term decline of biological diversity, thereby maintaining its potential to meet the needs and aspirations of present and future generations. (CBD)

SWOT Analysis - A SWOT Analysis is a strategic planning method used to evaluate the Strengths, Weaknesses, Opportunities, and Threats (SWOT) involved in managing a VCA. With respect the conservation of nature, it involves identifying the internal (SW) and external (OT) factors that are favourable and unfavourable to achieving conservation objectives. (VCA, adapted from Wikipedia)

VCA Hectare - A unit of measurement for a VCA; an alternative measurement unit is a VCA Acre. (GDI)

Verified Conservation Area (VCA) - A geographically-defined area which is listed on the VCA Registry and managed to conserve nature and use it sustainably in the context of sustainable development. (VCA, adapted from the CBD definition for a protected area)

Wetlands - Areas of marsh, fen, peatland or water, whether natural or artificial, permanent or temporary, with water that is static or flowing, fresh, brackish or salt, including areas of marine water the depth of which at low tide does not exceed six metres. (Ramsar)



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