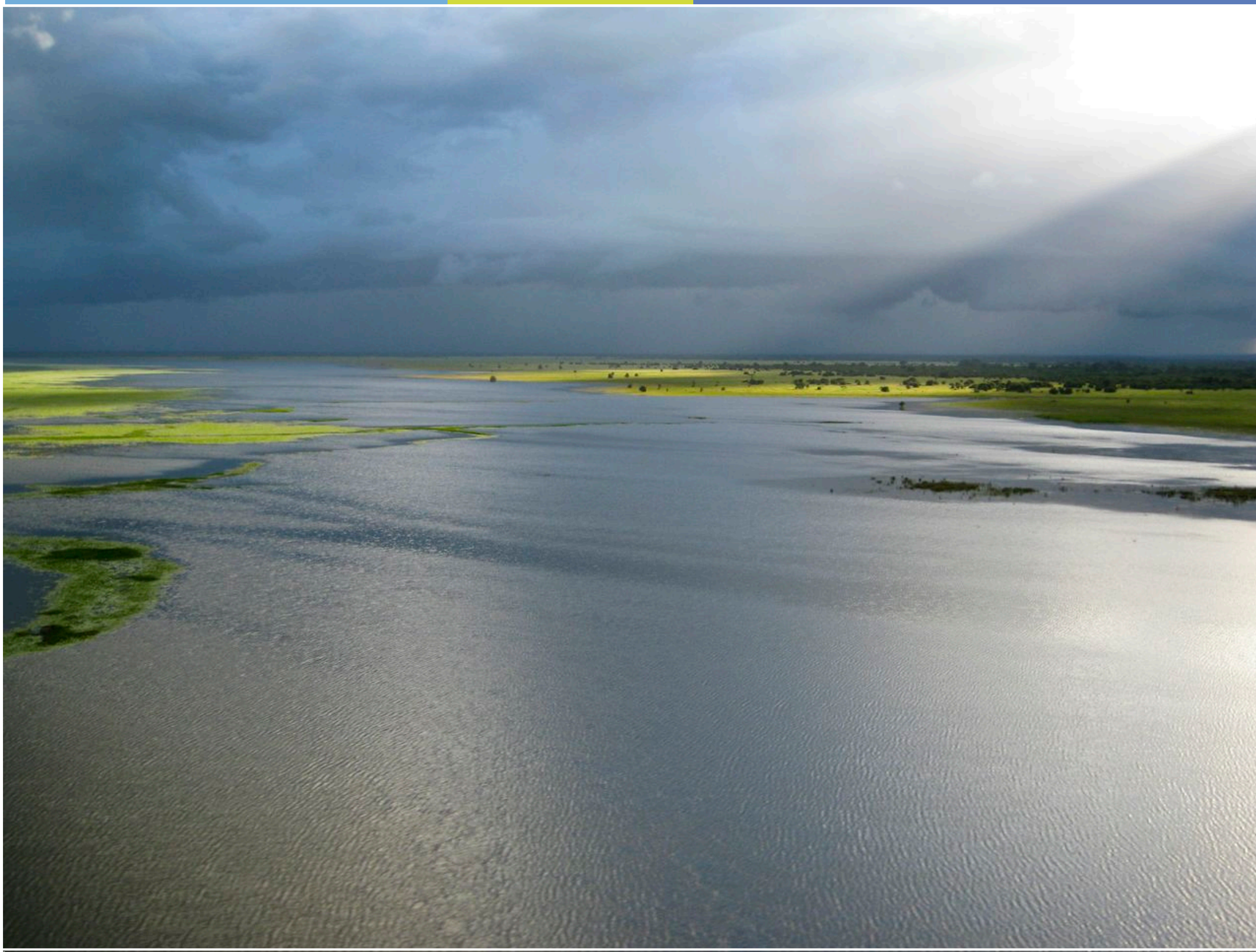
Mozambique

mobilizing extractive resources for development



Mozambique: Extractives for Prosperity, Volume II

Capstone Report: School of International and Public Affairs

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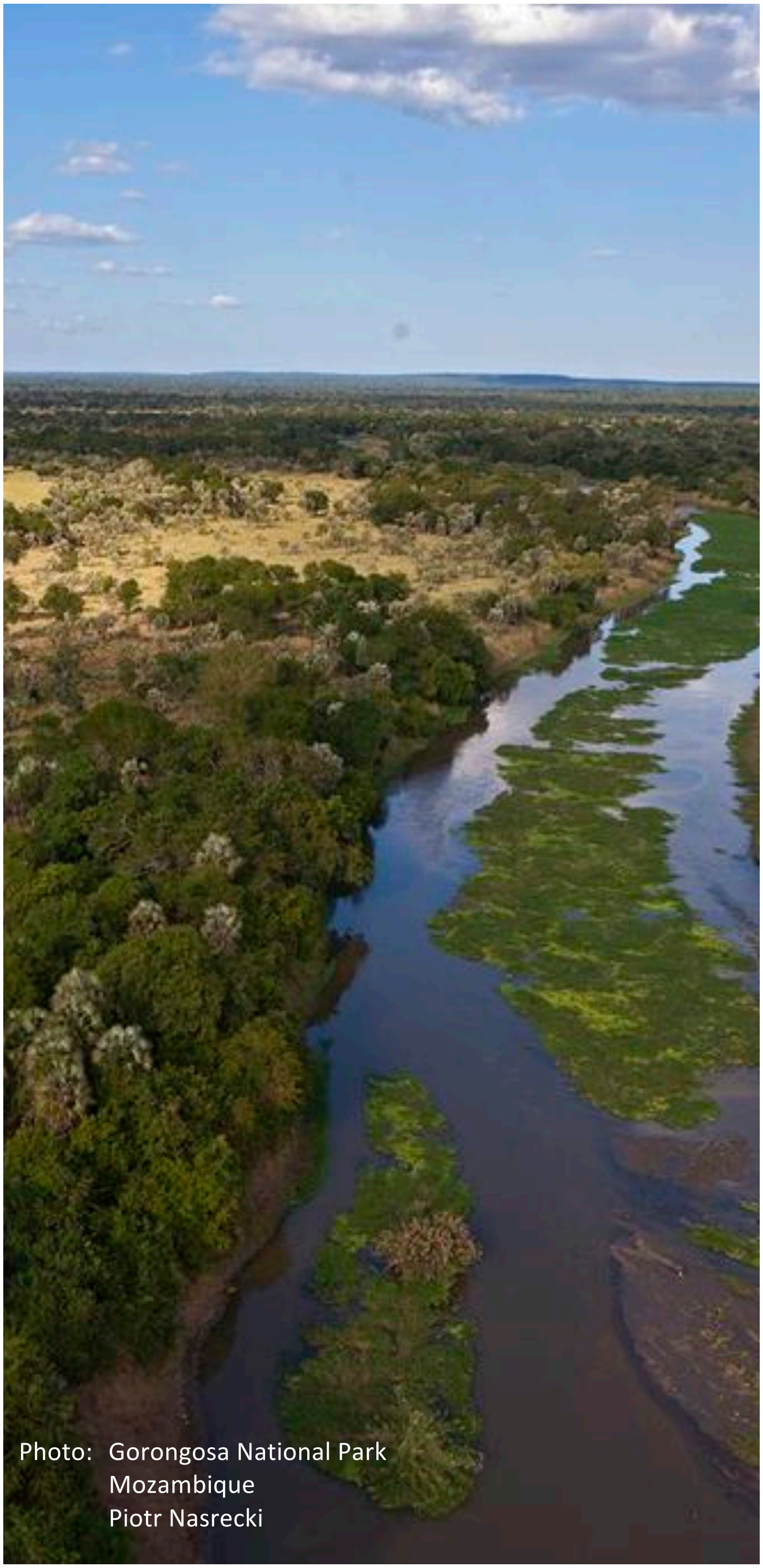

Photo: Gorongosa National Park
Mozambique
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Abbreviations

ADIA	Abu Dhabi Investment Authority
AICD	Africa Infrastructure Country Diagnostic
ANE	Administração Nacional de Estradas
ARTC	Australian Rail Track Corporation
ASM	Artisanal and Small-scale Mining
AT	Administrative Tribunal
BAGC	Beira Agricultural Growth Corridor
BBOP	Biodiversity and Business Offset Program
BSEE	Bureau of Safety and Environment Enforcement
BTU (MMBtu)	British Thermal Unit (Million BTUs)
CCEP	Central Public Ethics Commission
CEDAW	Convention on the Elimination of all Forms of Discrimination Against Women
CEP	Central Ethics Commission
CESUL	Projeto Regional de Transporte de Energia Centro-Sul
CFM	Caminhos de Ferro de Moçambique
CLIN	Corredor Logístico Integrado do Norte
CoM	Council of Ministers
CONDES	National Council for Sustainable Development
CRC	Convention of the Rights of the Child
CRVP	Commission for Receipt and Verification
DMP	Government of Western Australia Department of Mines and Petroleum
DNAC	National Directorate for Conservation Areas
DNM	The National Director of Mines
DOI	Department of Interior
EDM	Electricidade de Moçambique
EFC	Estrada de Ferro Carajás
EFVM	Estrada de Ferro Vitória a Minas
EIA	Environmental Impact Assessments
EITI	Extractive Industry Transparency Initiative
EMIS	Environmental Management and Information Systems
ENH	Empresa Nacional de Hidrocarbonetos (National Hydrocarbon Company)
EPCC	Exploration and Production Concession Contract
ESI	Estimated Sustainable Income
eSISTAFE	electronic State Financial Administration System
EU	European Union
FDI	Foreign Direct Investment
FPSO	Floating Production Storage and Offloading Vessels
FUNAE	Fundo de Energia
GAP	The World Bank's Gender Action Plan
GAPP	Generally Accepted Principals and Practices
GCCC	Central Office for Combating Corruption
GCPV	Central Victim Protection Office
GDP	Gross Domestic Product
GGFR	Global Gas Flaring Reduction partnership
GTL	Gas-to-Liquids
G 19	Group of 19 Partners for Program Aid
HCB	Hidroeletrica de Cahora Bassa
HDI	Human Development Index

HVCC	Hunter Valley Coal Chain
ICCPR	International Covenant on Civil and Political Rights
ICSID	International Centre for the Settlement of Investment Disputes
ICT	Information and Communication Technology
IEA	International Energy Agency
IFAD	International Fund for Agricultural Development
IFC	International Finance Corporation
IGF	Inspector-General of Finance
IIED	The International Institute for Environment and Development
ILO	International Labor Organization
IMF	International Monetary Fund
INP	Instituto National de Petroleo (National Petroleum Institute)
IOC	International Oil Company
IPEC	International Programme on the Elimination of Child Labour
IRR	Internal Rate of Return
IUCN	International Union for the Conservation of Nature
LNG	Liquefied Natural Gas
LPG	Liquefied Petroleum Gas
MCE	Maputaland Centre of Endemism
MDGs	Millennium Development Goals
MICOA	Ministry of Coordination of Environmental Affairs of Mozambique
MINAG	Ministry of Agriculture
MIREM	Ministry of Mineral Resources of Mozambique
MML	Minas Moatize Limitada
Model EPCC	Model Exploration and Production Concession Contract
MoF	Ministry of Finance
MP	Members of Parliament or National Assembly Deputies
Mtpa	Million-tons-per-annum
NBSAP	National Biodiversity Strategies and Action Plans
NEMP	National Environmental Management Plan
ODAMOZ	Overseas Development Assistance (Database) for Mozambique
ODI	Overseas Development Institute
OECD	Organization for Economic Cooperation and Development
OHCHR	UN Office of the High Commissioner for Human Rights
PAH	Polycyclic, aromatic and hydrocarbons
PARP	Republic of Mozambique Poverty Reduction Action Plan 2011-2014
PCI	Pulverized Coal Injection
PFCC	Petroleum Fund Consultative Council
POM	President of the Republic of Mozambique
PSSA	Particular Sensitive Sea Areas
PSC	Production Sharing Contract
SASOL	South Africa Synthetic Oil Liquid
SAIEA	Southern African Institute for Environmental Assessment
SEA	Strategic Environment Assessment
SIDA	Swedish International Development Cooperation Agency
SME	Small-and-Medium-sized Enterprise
SOE	State-Owned Enterprise
SPA	Sales and Purchase Agreement
SWF	Sovereign Wealth Fund
Tcf	Trillion cubic feet
UNCLOS	United Nations Convention On the Law of the Sea
WHO	The World Health Organization
WWF	World Wildlife Fund

Executive Summary

The development of Mozambique's significant mineral and hydrocarbon reserves has the potential to generate substantial wealth and prosperity for the country. The magnitude of possible benefits for Mozambique has powerful implications for one of the poorest nations in the world. It is up to the Government, and the people of Mozambique, to decide when, where, and, most importantly, how to utilize their reserves over the next few decades. Fundamentally, Mozambique is confronted with several challenges to transform its abundant extractive resource wealth – residing primarily in the country's inland coal deposits and its deep-water natural gas basins – into sustained, long-term economic development. This is a task of significant but not insurmountable complexity, encompassing a range of political, economic, and social dimensions. It will require collaborative and coordinated efforts by a variety of different stakeholders, some with conflicting objectives and priorities. It is thus incumbent upon Mozambique's leadership to manage this transition with purpose and develop and implement an industrial strategy that mobilizes the country's extractive resource development in a manner that achieves a prosperous outcome for its people.

Expectations of stakeholders are high, and this will not be an easy undertaking for the Government and people of Mozambique. Over the last five decades, numerous countries across the developing world have failed to benefit from their natural resource wealth. In fact, pervasive evidence suggests that resource-rich developing states tend to have lower economic growth rates and poorer development outcomes compared to states lacking such resources. Due to these paradoxical trends, collectively referred to as the resource curse, there is a renewed international focus on resource-rich, low-income countries like Mozambique.

This report provides a comprehensive review of the critical economic, political, legal, social, and environmental variables that will affect and be affected by the rapid development of Mozambique's extractive resources. Each section proposes methodical and practical recommendations for the country's policymakers, which – if implemented – will enhance the current institutional framework governing the activities of the extractive sector. Ultimately, this report attempts to provide the Government of Mozambique with a policy framework that promotes the sustainable development of the country's economy, society, and environment, and aims to help the country avoid the perils of the resource curse. These issues are described in greater detail in the summaries of each section of the report that follow.

Economic and Commercial

Mozambique stands to gain significant revenue from exploiting the economic and commercial potential of its natural gas and coal reserves. The country's offshore natural gas discoveries are among the largest finds in the world in over a decade, while it's coal reserves are beginning to be exported to international markets. If it is able to successfully commercialize its extractive resources, Mozambique will become a highly competitive player on the global energy scene.

In addition to promoting economic growth, the Government's overall economic objective is to reduce persistently high rates of poverty. Currently eight out of ten Mozambicans continue to live on less than $2 per day. In the years ahead, natural resource revenues will comprise an increasing share of the country's GDP, a trend that exposes Mozambique to several challenges in maintaining financial and social stability. Despite ongoing reforms, the country's overall capacity to absorb windfall revenues from the development of extractive resources remains limited. Yet, with sound fiscal management, these hurdles can be overcome. There are a number of measures the Government can take to better prepare itself for the windfall. Prior to exploring such measures, however, it is first important to understand key implications of the resource curse and how it threatens Mozambique.

Generally, there are two underlying features of the resource curse that afflict countries: "Dutch Disease" and revenue volatility. Dutch Disease refers to the destabilizing impact of increased foreign exchange that inevitably follows a sharp rise in natural resource exports. A huge increase in natural resource revenues typically causes the real exchange rate to appreciate. The change in real exchange rate results in economic destabilization by reducing the international competitiveness of a country's non-extractive resource exports (e.g. agricultural and manufacturing) and may also reduce employment in these sectors. These economic outcomes tend to adversely affect the labor force of a developing country, where undereducated workers often struggle to transition from traditionally low-skilled sectors of the economy to more knowledge-based and service-oriented industries.

Revenue volatility is another important facet of the resource curse. The disruptive effects of revenue volatility in a resource-based economy predominantly arise from fluctuations in global commodity prices. This volatility can be detrimental to growing economies and frequently results in imprudent fiscal policies. Often, governments borrow against the value of their newfound resources and spend windfalls on immediate consumption, at the expense of long-term investments that can hinder future growth opportunities for the country.

The resource curse commonly takes hold in developing nations that lack the institutional capacity necessary to manage huge resource revenues. To minimize the impacts of Dutch Disease and revenue volatility, a state must have sound institutions in place. Institutions are also necessary to manage complex public-private revenue-sharing partnerships that are typical of extractive industries. A sovereign wealth fund is one option that states can utilize to manage large inflows of resource revenue, stabilize pressures on the exchange rate, and reduce the influences of price and revenue volatility. The implementation of this fund (explained further below) is one of the central recommendations of this report. Above all, a sovereign wealth fund allows Mozambique to invest in infrastructure and socioeconomic development over the long-term, thus ensuring that the country will still see benefits of its extractive resources long after the reserves have been depleted.

Linkages and Local Content

Mozambique's national resource wealth is not limited to revenue generation for the state but can and must flow to benefit local Mozambicans. Conventional understanding about how the local population benefits from extractive resources is typically limited to the industry's provision of employment and a few philanthropic projects. However, extractive industries tend to have a minimal impact on the labor market. The capital intense nature of extractive industries stems from industry demand for fewer, more highly skilled workers compared to the labor-intensive, low-skilled workforce sectors – such as agriculture or manufacturing. Low prevalence of human capital in Mozambique further limits employment opportunities for Mozambicans in the extractive sector – leading to unfulfilled expectations in communities and promotes social unrest. This section provides examples and recommendations of how the Government, extractive companies, and stakeholders can increase employment opportunities for Mozambicans in the extractives sector and economic linkages between the extractive industries and Mozambique's local businesses, especially in regions of extractive operations.

Prosperity driven by the growing extractive industry can be translated to communities in Mozambique through cultivating local content – including local recruitment, training, and purchasing local goods and services. Though not a "silver bullet" to prosperity, local content can contribute to the fulfillment of expectations that mineral and hydrocarbon production will help improve the lives of Mozambicans. Local content is also critical to the extractive industry's operational sustainability by generating a social license to operate within a given community. Smooth, sustainable operations also benefit the state by supporting steady revenue flows and general social stability.

Given local human capital and the capacity of Mozambique's private sector are currently very limited, it is critical that both the government and extractive companies initiate early and consistent engagement with communities and the local private sector in regard to both the type of employment and business opportunities that will be available. Additional management of expectations through transparent communication of the expected timeline of these opportunities is also necessary. To achieve optimal local content goals, the government must also invest deliberately in the provision of poverty-reducing public goods, including quality education, literacy, and healthcare, which in turn serve to improve human capital in the long-run. These efforts require significant strategic social investment by stakeholders to build the capacity of local communities and enable individuals and businesses to compete and access income-generating opportunities in the newly established extractive industry value chain. Without investment in the development of Mozambique's human capital and building capacity of the local business sector, Mozambique's ability to fully access and realize the potential benefits of its vast natural resource wealth will remain retarded. Finally, this section also discusses the need to develop and implement a strategic plan that mitigates inward migration, local food price inflation, and constraints on community resources affecting areas impacted by extractive industry operations in Mozambique that could be source of social instability.

Infrastructure

Marked rates of underdevelopment in Mozambique are closely tied to the country's shortage of infrastructure, which has largely failed to respond to social and economic development needs. Although recent public, private, and donor investment in developing Mozambique's infrastructure has focused much more on facilitating the trade derived from megaprojects, it might also represent an unparalleled opportunity to build a system that fosters inclusive social development. The Government has the option to take advantage of the international community's willingness to invest and orient economic resources to address infrastructure-related impediments of development.

Ensuring inclusiveness, through both connection and universal access to roads, railways, and electricity, must be at the heart of this endeavor. Railways, in particular, must guarantee access for general freight and passengers, as well as for mining companies. With respect to Mozambique's roads, an upgrade and significant extension of the network would decrease transportation costs for all parties. This, in turn, would help mitigate the country's high rates of poverty and inequality, permitting both the mining provinces and the rest of the country to benefit from extractive industry operations. Special attention must be paid to use of roads as connectors between impoverished yet potentially productive areas and the Beira, Nacala and future Macuse corridors. Finally, despite the current efforts of the Government to bring the grid to every district, only a small percentage of Mozambicans have reliable access to electricity. The potential for clean production must be developed to provide electricity access beyond district centers, and to help reduce Mozambique's reliance on unsustainable energy sources.

Environment

Protecting the country's ecology is critical to Mozambique's vitality and will require investment and attention to environmental governance that keeps pace with resource extraction. First, to mitigate environmental risks inherent in resource development, research into fisheries and terrestrial ecosystems is necessary to create a baseline for conservation priorities, since much of Mozambique's ecology is not well researched. The existing Environmental Impact Assessment review period is also too short for the increasing volume of assessments and the current limited capacity of the Government and civil society. Such assessments for large extraction projects and their corresponding infrastructure development should be made available to the public with a longer, more adequate review period than the current 45 days. In line with the country's existing environmental law, specific requirements and guidance on biodiversity offsets must be drafted and enforced to ensure that all small and large-scale extractive resource projects account for environmental impacts from the beginning of the project.

Mozambique's current environmental legislation should be reinforced with more detailed guidance. Exemplary laws from other countries, such as Norway, can be utilized for legal reference until a robust new set of laws can be established. With ongoing active exploration of the natural gas, Mozambique should dictate when and where seismic surveys are conducted in order to protect the delicate biodiversity surrounding the nation's corals and fisheries. In addition, the government must create an environmental emergency plan so that, should accidents occur, the various government ministries have an aligned mitigation strategy that facilitates rapid response. Additional funding, training, and resources allocated to environmental ministries are also necessary to expand their capacity to study the nation's ecology, properly implement protective legislation, and adequately monitor mining and natural gas exploration and production. Additionally, the growing artisanal mining sector needs strategic Government support to organize associations, as well as train, guide, and monitor expansion to ensure the safety and prosperity of Mozambicans. In this way, small-scale mining could become a means to reduce poverty as opposed to creating conflict and environmental degradation. All of these governance strategies will need to be implemented quickly and should utilize revenues from the extractive industry to guarantee that Mozambique's dynamic ecology continues to be a source of pride and the pillar of a growing tourism industry.

Resettlement

Resource exploration, mineral concessions, and infrastructure development have all exponentially increased the resettlement of communities in Mozambique, especially in remote areas. Although the country has the extraordinary opportunity to strategically translate its mineral assets into long-term sustainable development, extractive operations can only be fully successful if the investments are embedded in stable and prosperous communities. One of the country's top objectives should be to leverage the recent boom in extracting natural resources to improve the living conditions of Mozambicans and to ensure a prosperous environment in which companies can diligently operate.

If Mozambique follows five basic resettlement principles, the rights of Mozambicans and compliance with the international conventions and agreements that the nation has pledged to support will be ensured. First, projects that require resettlement must conduct early, inclusive and transparent consultations to give communities the opportunity to make decisions on issues directly affecting their lives. Early consultation also helps build critical buy-in from impacted populations. Second, it is key to provide communities with the tools and information to diligently participate in negotiations that reach fair agreements. Third, compensation, that includes improved livelihoods and standard of living is key to translating resource extraction into prosperity for individuals affected by resettlement. Fourth, resettlement processes entail negative environmental impacts that must be diligently addressed as they highly impact the health conditions and access to other resources (water, soil, etc.) of the surrounding communities. Lastly, an inclusive and legitimate post-resettlement committee must oversee agreement compliance, progress, and accountability. Such a committee also recognizes that communities are dynamic and future agreements will have an established channel for discussion. A well-structured and well-managed resettlement process, jointly agreed upon by communities and companies, can help to ensure that extractive operations and other projects that require resettlement enjoy greater community buy-in and promote sustainable development.

Mozambique must also ensure that women are not left out of opportunities to participate in and benefit from the country's development through the extractive industries. The Government bears a duty to ensure women's equal access to socio-economic opportunities, reduce disruptions to their standards of living and improve livelihoods. In the context of mining operations, Mozambique can meet these challenges by implementing its existing laws and Constitutional provisions which guarantee the equal rights of men and women, along with amending existing mining legislation to address issues on resettlement, consultation and compensation.

Such arrangements also stand to benefit from local resources (including human capital), thereby reducing the likelihood of conflict. The resettlement process in Mozambique is ongoing, and there are a number of ways that the Government can promote mutually beneficial resettlement agreements leaving all parties affected better off and fairly attended.

Legal Framework

From a legal perspective, Mozambique must aim to reform and update the legislative, institutional, and contractual frameworks associated with extractive industries in order to maximize the gains from and minimize the costs of extractive resource development. In this context, Mozambique is currently reviewing its legal and fiscal frameworks for oil and gas exploration and production, to take into account developments in the industry and new gas discoveries. Recent drafts of the petroleum legislation contain several important additions that address infrastructure, revenue sharing, oversight, and environmental protection. However, the law needs further strengthening to ensure that new and existing projects are carried out in a safe, fair, and efficient manner. Vague references to "good industry practice" should be replaced with clear and transparent obligations. Deals should be standardized and their key terms should be set in legislation to improve transparency and competitiveness. Companies must be assured fair and open access to facilities to promote competition and increase efficiency. Penalties must be clear and significant to deter bad behavior. Environmental protections should take into account that companies are often in the best position to monitor, prevent, and mitigate environmental and health risks. The Government must also preserve its ability to reform and improve its legislation over time - especially in relation to the environmental, social, and health impacts of extractives.

The fiscal regime should draw on a range of different tools to generate a fair share of revenue for Mozambique. While opinions may differ on what is "fair", Government revenue should amount to at least one third of the profits for mining and 65% of the profits for oil and gas over the lifetime of a project. As the industry becomes more established, and business conditions improve, this share should increase substantially for future projects. The regime needs to balance up-front income with long-term objectives - taking into account the legitimate interests of investors, the capacity of public agencies to administer the regime, and the interests of future generations of Mozambicans.

There is also a critical need for existing mining legislation to be examined and amended, in order to better reflect the growth of the sector and to protect the interests of the Mozambican people, particularly with respect to environmental, health, social, fiscal and contract transparency considerations. Accordingly, provisions of the current Mining Law of 2002 should be amended in these distinct areas, giving mining activities a modern and adequate regulatory basis to ensure greater competitiveness, guaranteeing the protection of rights and defining the duties and obligations of holders of mining titles. While the Mining Law of 2002 is undergoing revisions and is expected to be passed by Parliament in the coming months, this section sets forth policy recommendations which illustrate some of the gaps and challenges present in Mozambique's mining legislation. Reforms in the mining laws offer an important opportunity for the country to further develop its economy, and importantly, to promote equity, reduce poverty, and meet its development goals through a forward-looking approach. The recommendations in this section are offered to strengthen, clarify and update existing mining legislation, and provide guidance on how mining activities can be conducted in a manner, which prioritizes and improves the social and economic well being of the Mozambican people.

Governance

The Government must adopt a transparent and uniform policy framework and fiscal regime to effectively administer the process of extractive industry development vis-à-vis government costs and revenues. To this end, Mozambique should create an accountable and transparent framework of governance to manage its extractive assets. There must be checks and balances built into the institutional structures of the Government. This will create accountability, separate responsibilities to minimize conflicts of interest, expand powers for specific agencies to fulfill their roles, and allow for agencies to manage extractive resource development accordingly. Mozambique must also focus on anti-corruption measures to improve its governance. Some useful tools include the anti-corruption law as well as other Information and Communication Technology platforms that can help bolster the country's systems of oversight. Above all, transparency must become a fundamental part of the extractive industry's contractual process, to ensure that all parties are getting their fair share of revenue.

Sovereign Wealth Fund

Sound revenue management is key to the sustainable development of Mozambique's economy. The financial impact of natural gas and coal exportation can have detrimental effects for the country. As mentioned above, problems arise from real exchange rate appreciation, which puts other export industries out of business, and from fluctuation in commodity prices, which is destabilizing for the domestic economy. Establishing a sovereign wealth trust fund in a traditional financial center will help Mozambique absorb the coming windfall and promote growth and development in the country in five key ways. First, it effectively shelters the domestic economy from the commodity sector, so that volatility in oil, gas or coal prices do not have such a disruptive effect on the country's budget planning from one year to the next. Second, by channeling revenues into specific development programs, the fund can help the government to focus and plan for expansion of infrastructure, education, healthcare and public services. Third, the fund can help to ensure that government revenue from extractive resources become an ongoing source of income for decades to come, and provide intergenerational equity. Fourth, and crucially, a sovereign wealth fund can insulate Mozambique's currency, helping to ensure that investment in the extractives industry does not have negative impacts on other sectors of the economy. Finally, the trust will legally enshrine the purpose of the fund and thus insulate Mozambique's fund from sovereign debt and facilitate the country's access to international financial markets due to improved legal standards.

Mozambique Moving Forward

Mozambique is embarking on potentially one of the most defining opportunities of the nation's history. Despite the impoverished state of much of the country, Mozambique is endowed with significant hydrocarbon and mineral resource wealth in an era that is experiencing innovation, awareness, and collaboration at an unprecedented rate. The nascent development of Mozambique's large-scale hydrocarbon and mineral reserves is a point of strength and opportunity for structured and deliberate leadership to shape the future of Mozambique into a prosperous regional authority with the capacity to be a source of strength and guidance beyond its borders.

There is universal familiarity with the potential outcomes that lie ahead for Mozambique. The nation's limited human capital and restricted absorption capacity of the local public and private sectors to adapt and manage the rapid changes underway exemplifies the necessity for Mozambique to engage actively, early, and transparently to realize the opportunities at hand. However the continuum that flows between a resource blessing of prosperity and a resource curse is process of significant complexity. Multi-directional relationships between the economics, social, environmental, political and legal aspects of natural resource development requires clear frameworks and implementation of transparent objective that will benefit the nation now and for future generations. The areas this report examines identifies the current and potential weakness that could derail Mozambique's intention to pursue a path of sustainable development that is supported by revenues and income generating potential of the growing explorations and production of Mozambique's natural resources. Each section also includes recommendations that address the challenges and opportunities specific to the changing environment of Mozambique's natural resource extraction.

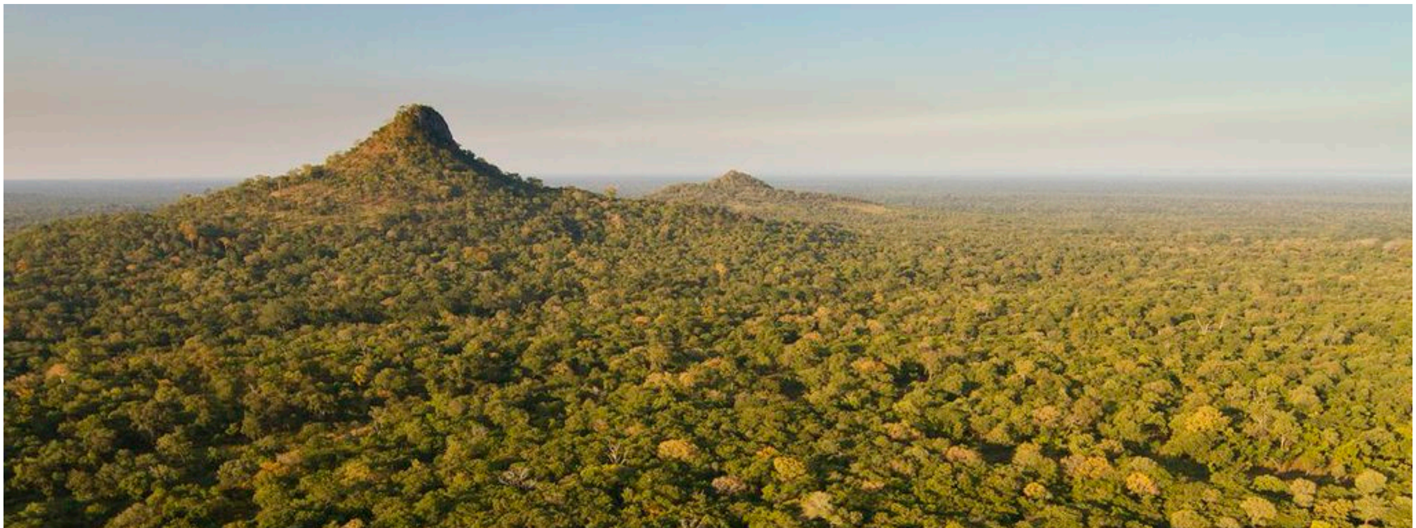

Photo: Gorongosa National Park
Mozambique
Piotr Nasrecki

Introduction

On the south-eastern coast of Africa, Mozambique is a country of extraordinary natural beauty and cultural diversity. While its natural riches have been known to the world for centuries, it is only recently that the discovery of extensive gas reserves and coal deposits have drawn the attention of foreign investors.

As one of the least developed countries in the world, Mozambique faces significant challenges to bring these resources safely and sustainably to market, and to manage the resulting funds. In the aftermath of independence and a devastating civil war, the country has made significant progress to build social stability and begin to lift its people out of poverty. However, much work remains – and while extractive resources offer opportunities for prosperity and growth, the influence of multinational corporations, donors and international organizations (each with different interests) has complicated an already complex environment.

This project has reviewed Mozambique's unique economic, legal, institutional, environmental, and social context to assess the potential impact of the extractive industry (both positive and negative). Through consultation, research and interviews, the team has drawn on the knowledge within Mozambique, as well as on the experiences of other countries, to formulate a number of specific and implementable recommendations that will help Mozambique to mitigate the risks and maximize the benefits of extractive industry development. Our team's particular focus has been to harness the existing strengths and potential within Mozambique civil society and government, and to prioritize key areas of reform.

The Capstone team began work in November 2012, and carried out desk research from Columbia University in New York for several months. In March 2013, eleven team members traveled to Mozambique. While most of our time was spent in Maputo conducting interviews with stakeholders, companies, donors, NGOs and Government agencies, two team members traveled to Pemba to research the new natural gas developments in that region. We were privileged to have the assistance and insight of dozens of committed people during this period. Although our visit was brief, we were able to conduct over 40 meetings addressing the broad scope of issues covered in this report. On our return to New York, further research supplemented our interview material.

The resulting report is divided into nine sections, each with a particular focus. However, many of the issues overlap – and these themes are addressed from several angles. Key themes that emerge throughout the report are the importance of education, the need for engagement and consultation with local communities, and the opportunity for Mozambique to learn from and improve upon international experience.

Section 1 provides an overview of Mozambique's Economic and Commercial context, and introduces some of the key considerations for the development of extractive industries. In addition to outlining the prospects for Mozambican gas on the world market, this section discusses the important issues of contracting and financing LNG production. The local and global commercial prospects of coal production are also discussed.

Next, we address the importance of creating linkages between foreign enterprises that invest in Mozambique's extractive industry, and local companies. In particular, the section highlights that small and medium-sized enterprises need support, regulation, infrastructure, and training to improve their efficiency, and to engage in commercial relationships with international investors. By encouraging "linkages", Mozambique can ensue that foreign companies are more integrated and more efficient, and that the benefits of extractive industry can flow directly to the communities where they operate.

Section 2 expands on this idea, exploring the benefits and practicalities of "local content" requirements. Employment of local residents, procurement from local suppliers, and other forms of local input can increase efficiency for companies and generate "social license to operate." This section provides an overview of Mozambique's socio-economic context and a close-up view of two regions that are greatly impacted by coal and natural gas development – Tete and Cabo Delgado, respectively. Finally, the section addresses areas of risk and strategies for mitigation, including inward migration and inflation.

Section 3 provides a snapshot of Mozambique's infrastructure with a focus on roads, railways, and energy. It assesses the potential impact of expansion by extractives companies and presents an argument for inclusive infrastructure – infrastructure that is accessible and affordable for local people, and for other enterprises.

Section 4 highlights the multiple, complex environmental concerns that extractives development raises. Natural gas exploration and production and coal mining both present threats to the environment, to livelihoods, and to health, including marine life, water quality, air quality, land, and biodiversity. The section presents a number of recommendations for legal and institutional changes that will help to preserve Mozambique's unique ecology and landscape, and to protect the health of its people.

Section 5 presents an analysis of the impacts of resettling communities to make way for extractive resource projects. The section highlights the importance of an early, open, and inclusive consultation process, founded on free and informed consent. Recommendations focus on improving resettlement practices, including compensation and protecting livelihoods, and identify the particular safeguards that are needed uphold the rights of women.

Section 6 moves to the legal framework for mining in Mozambique. It outlines the current legislative provisions and licensing process, and provides detailed recommendations on how these laws can be strengthened and improved. Environment, resettlement, fiscal and transparency issues are all considered.

Section 7 assesses the existing gas and petroleum laws, and discusses options for reform in light of the most recent draft amendments. It presents an analysis of the "gaps" in the law and touches on the particular issue of foreign investment and arbitration.

Section 8 presents the case for strong and reliable institutions to govern extractives industry in Mozambique. It outlines the progress that Mozambique has already made towards transparency, and recommends general and entity-specific policy changes. Capacity building and e-governance are also discussed.

Section 9 proposes a sovereign wealth fund for Mozambique, with a structure that will help to ensure that extractive industry revenues are a blessing, and not a curse, for the country. The section outlines how a sovereign wealth fund can help to manage Dutch disease and inflation, presents options for managing and investing the resources, and identifies the various funds which could be created to direct revenues into the Government budget, stabilization, development and savings, development.

The report concludes with a summary of the Recommendations, and a Bibliography of sources.

The Appendices are intended to provide additional detail and context for interested readers. They include resources that have been collated by the authors from a range of different sources, for ease of reference. Appendix 1 sets out a number of tables with additional detail about the legal framework and contracts for mining, gas and petroleum, including some advantages and disadvantages of the different types of fiscal tools used by governments to collect revenue from extractive operations. Appendix 2 includes resources for Sovereign Wealth Fund governance, including international comparisons, details of the *Santiago Principles* and the Linaburg-Maduell Transparency Index. Finally, Appendix 3 includes relevant development indicators for Mozambique, along with comparison countries for reference. The tables incorporate economic, commercial, social and governance indicators, and serve as a "snapshot" of Mozambique's current development.

A Note on Priorities

This report sets out 105 distinct recommendations for Mozambique, covering economic, infrastructure, social, legal, environmental, governance, and financial issues. The recommendations, which are summarized at the conclusion of the report, should provide guidance and provoke discussion among government, civil society, donors, and the business community. However, it is unrealistic to expect that Mozambique will be able to address all these issues immediately and simultaneously. The people of Mozambique must decide what issues are most pressing and most important for themselves.

This section is intended to give an outline of what the Capstone project team identified as the key priorities for change in the short and medium term.

Get the legal framework right to ensure a balance of rights and responsibilities

Mozambique's legal framework for oil, gas and mining needs drastic changes to address the challenges that lie ahead. It is essential that the new laws set out clear and detailed obligations for companies and for the government about responsible environmental and social practices. Where gaps remain, the laws should refer to the rules of jurisdictions with robust laws, such as Norway and Australia. The fiscal regime must also be clear, transparent, and standardized for all projects – not negotiated on a case-by-case basis. Closely related to the law is the importance of institution-building to enable implementation. Mozambique's ministries and government agencies must have the support, the training, the power, and the resources to effectively negotiate concession contracts, regulate, monitor, and enforce the legal framework.

See: Section 6: The Need for Upgraded Mining Laws, *Section 7:* Gas and Petroleum Laws*, Section 8:* The Case for Strong and Reliable Institutions*,* and *Section 4:* Protecting Mozambique's Environment*.*

Carefully manage the revenues from extractive industries for the benefit of all Mozambicans

Oil, gas and mining have immense economic potential – but that potential will only be realized if projects are taxed appropriately, and revenues are managed carefully. Once a fiscal regime is in place, the revenues from all projects should be paid into a resource fund that is designed to suit Mozambique's situation. A Sovereign Wealth Trust Fund would provide a structure that is clear and straightforward, with enough flexibility to allow for different stages of development. First, extractives revenues could contribute to initial budget funding (in lieu of donor funding), and could be used to help stabilize the economy. As the fund grows, investments in infrastructure and special development projects could follow. Ultimately, the fund could also incorporate a savings fund that generates wealth for decades to come.

See: Section 1: The Economic and Commercial Implications of Natural Gas and Coal*, and Section 9:* Managing Wealth: The Sovereign Wealth Fund*.*

Provide economic opportunities by making infrastructure inclusive and accessible

Infrastructure development will be an essential component for Mozambique to turn its resources into commodities. However, infrastructure that serves only large commercial enterprises can exacerbate inequality. The government must plan carefully to ensure that the money invested in infrastructure has as many flow-on benefits as possible – this means engaging with small enterprises and with the public to ensure access to reliable transport and electricity networks.

See: Section 3: The Need for Inclusive Infrastructure*.*

Protect and empower local populations to preserve stability

Mozambique must immediately address the disruptive impact of current and future resettlement projects to ensure that local populations do not lose out when extractive projects take place in their region. Over time, these disruptions can violate fundamental human rights, entrench poverty, cause social unrest, and make it impossible for businesses to operate efficiently and safely. By encouraging local content and local linkages, Mozambique can help to ensure that foreign investment is more efficient and contributes to real, sustainable benefits to the community.

See: Section 2: Translating Extractive Industry Prosperity to Mozambique's Communities and *Section 5:* Ensuring Social Equity in Extractive Industries-Based Development*.*

Education is critical to sustainable growth and a better quality of life

Although it is not a dedicated topic in this report, education and capacity-building is a common theme in our analysis. Training and education will help Mozambique's lawmakers, officials, civil society, business people, and all citizens to make good decisions about managing extractive resources. The revenues from those resources, in turn, should be invested in improving the quality and accessibility all levels of education – from primary through to specialist tertiary education.

See: Section 2: Translating Extractive Industry Prosperity to Mozambique's Communities*, Section 4:* Protecting Mozambique's Environment*,* and *Section 8:* The Case for Strong and Reliable Institutions*.*

Foster and protect Mozambique's other "comparative advantages"

Once the coal has been mined, and the gas extracted, Mozambique will need to depend on its people, its land, and its waters for continued economic growth. Among others, Mozambique has the potential to develop a vibrant agricultural sector, and a world-class tourism industry. But both of these sectors could be seriously threatened if extractive developments are not well planned or well regulated. Loss of arable land to mining, pollution or contamination of water, disruption of habitats, and the physical scars of extractive industries will directly impact this economic potential. It is possible for these industries to coexist – but only if strong and enforced laws protect the environment and the people of Mozambique.

See: *Section 4:* Protecting Mozambique's Environment*,* and *Section 5:* Ensuring Social Equity in Extractive Industries-Based Development*.*

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Mozambique

mobilizing extractive resources for development

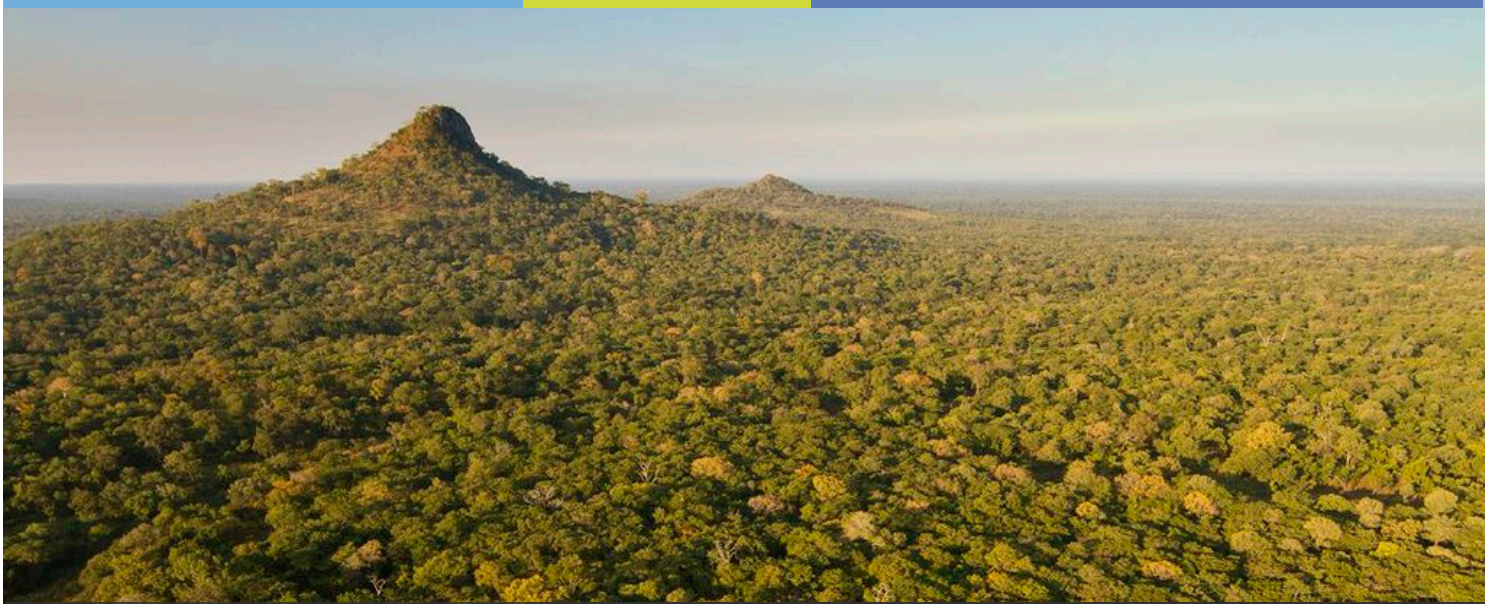


Photo: Gorongosa National Park
Mozambique
Piotr Nasrecki

Section 9

Managing Wealth:

The Sovereign Wealth Fund

9 Managing Wealth: The Sovereign Wealth Fund

> *Sovereign wealth funds can be a force for common good…. They can play an important role in a country's development strategy, helping the transfer of technology and the creation of jobs {and} they can be helpful in managing the risks that countries face.*
>
> Joseph E Stiglitz[625]

9.1 A Sovereign Wealth Fund for Mozambique

The question of whether to establish a sovereign wealth fund ("SWF") to manage revenues from extractives is hotly debated in Mozambique. While the central bank, the Banco de Mocambique, is working on a proposal to introduce a Mozambican SWF, other government entities are skeptical about the timing and efficacy of such a fund. The Gas Master Plan, of which the executive summary was published in December 2012, only mentions the establishment of a SWF as one of five options for challenging gas revenues to development.[626]

There seems to be a popular belief that the establishment of a SWF would mean parking the revenue accruing from the country's extractive sector abroad and holding it there. Many are concerned that those funds would be better suited to stay in Mozambique, where they are badly needed for local investment, development, and poverty reduction. While it is clear that a Norwegian-style SWF is not suitable for a country in need of significant domestic investment such as Mozambique, it has to be emphasized that a SWF and investment in domestic development are not at all mutually exclusive. On the contrary, a SWF is an excellent tool to increase efficiency in Mozambique's investments, while maintaining macroeconomic stability and providing savings for future generations. Indeed, both the goals of investment and saving for the future can be achieved. The answer lies in how a SWF is structured, managed and operated.

By 2025 the revenues expected from the export of natural gas alone will surpass Mozambique's current GDP. While coal exportation will also bring financial benefits, the biggest financial impact lies in the country's natural gas production and its conversion into liquefied natural gas ("LNG") for export. It is therefore very important that the government prepares itself for the powerful financial impact expected in the future before natural gas production is up and running. There is enough time now to establish a robust and highly structured SWF, ensure its legal enshrinement, and establish the necessary oversight and operating mechanisms. Once the revenues start flowing, it will be too late to do this in a thorough and reflective manner. While this issue might not seem urgent at the present time, it is critical to the success of Mozambique's revenue management.

SWFs have not always enjoyed positive media coverage. Some funds have been accused of making politically motivated investments, while others have suffered from a lack of transparency or even mismanagement. That being said, a SWF is a legal and policy tool that can work very well if properly structured and managed.

Weak economic performance of resource rich countries can typically be traced back to low saving rates and boom-bust cycles. However, a well set-up SWF allows for sound and simple revenue collection while establishing mechanisms to protect the economy from fluctuations in commodity prices and enabling development and saving mechanisms. It can be an excellent national planning tool.

In the case of Mozambique, where expected revenues from natural gas and coal exports will make up a large part of the country's annual GDP, sound management of the revenues is critical. Countries like Nigeria and Chad have shown that extraction of natural resources can have little to no beneficial effect on the population if the revenues they generate are not managed with the highest standards available. Nigerian oil production has caused social unrest rather than prosperity, burdening the country with severe social challenges. Lax dealings with commodity revenues have further been identified as one of the main causes of the *Resource Curse.*

Recommendation 89: Mozambique needs a SWF for the thorough management of its natural resource revenues. Now is the time to prepare the relevant institutions and actors and create the legal framework for resource revenue management.

9.1.1 Dutch Disease

A sovereign wealth fund promotes growth and development in the country in four ways. First, it effectively shelters the domestic economy from the commodity sector, so that volatility in oil, gas or coal prices do not have such a disruptive effect on the country's budget planning from one year to the next. Second, by channeling revenues into specific development programs, the fund can help the government to focus and plan for expansion of infrastructure, education and public services. Third, the fund can help to ensure that government revenue from extractive resources become an ongoing source of income for decades to come, and provide intergenerational equity. Finally, and crucially, a SWF can insulate Mozambique's currency, helping to contribute that investment in the extractives industry does not have negative impacts on other sectors of the economy. For example, a sudden and ample foreign exchange influx due to sales of natural resources will cause significant appreciation of the real exchange rate, through appreciation of the nominal exchange rate and/or a rise in the domestic price level. This effect on the price of a currency, also known as *Dutch Disease,* increases the relative prices of exports and effectively renders other export industries non-competitive since they become too expensive.

If it happens in advanced economies then it can happen in Mozambique

"The term *Dutch Disease* originated in the Netherlands during the 1960s, when the high revenue generated by its natural gas discovery led to a sharp decline in the competitiveness of its other, non-booming tradable sector. Despite the revenue windfall the new discovery brought, the Netherlands experienced a drastic decline in economic growth. The huge foreign exchange from the export of the gas led to a shift in prices and appreciation of the exchange rate, so that previously competitive exporters lost market share and production of those exports fell."[627]

If *Dutch Disease* were to strike in Mozambique, it would put Mozambican farmers out of business, make the country's economy less diversified, and therefore more reliant on the extractive industries. This could potentially lead to social unrest as it did in Nigeria, and increase Mozambique's dependency on South African imports even further. Once oil and gas reserves are exhausted, the country would have no vibrant export industry to sustain its economy, and face rising poverty and a general decline in living standards.

If all the money stemming from extractives exportation were spent on imports it would not have much of an effect on the real exchange rate. However, the bulk of the income is often converted into local-currency and spent on domestic non-traded goods. If this happens in a fixed-exchange rate regime (where the currency is not allowed to fluctuate), it would inevitably lead to an increase in money supply, which would increase domestic demand and ultimately increase domestic prices. The increase in domestic prices appreciates the real exchange rate and is concerning due to an increase in inflation. In a country with a floating exchange rate regime, such as Mozambique, an increase in the supply of foreign exchange would appreciate the nominal exchange rate and therefore the real exchange rate (the Metical becomes relatively scarcer).[628]

Mozambique can avoid this scenario by holding its commodity revenues in foreign currencies and investing in productive foreign assets, both of which are to be located in an established, traditional financial center such as London, New York or Singapore. This would avoid a sudden and massive influx of foreign exchange, and help to hedge currency exchange risk. Simply holding the revenues from the megaprojects in an established financial center and letting them flow back into the economy in a controlled manner will help avoid a negative impact on the exchange rate.

Recommendation 90: Place the SWF in a well-established, traditional financial center located in London, New York or Singapore. Invest in foreign assets and currencies to create a diversified portfolio that generates ongoing revenue for the country.

9.1.2 Managing Expectations

A well-structured SWF is one of the most important tools available to Mozambique to promote sustainable development and long-term growth. It will support a stable economy, which also has spillover benefits for the country's political and democratic development. When natural resources are found, there are often high expectations among citizens and politicians about investments and rapid improvements of infrastructure, health systems and education. While these expectations are understandable and valid, caution has to be exercised when investing in order to avoid stoking inflation.

Absorption capacity

The speed and degree in which investment can take place depends heavily on a country's absorption capacity. Sudden increases in domestic demand can lead to supply bottlenecks that push up the prices of non-tradable goods, which include most services and ultimately spike inflation.[629] Aside from the North-South axis, paved roads in Mozambique are fairly sparse and the country has one of the lowest electrification rates in the world. The lack of these and other prerequisites for many investment projects makes it difficult to complete them in a way that is efficient and economical. Similarly with education, Mozambique needs to increase primary and especially secondary education before it can significantly increase the number of doctors, nurses, engineers etc. Singapore invested heavily in education in the course of its economic rise, but it took decades for that small island state to reach its current level of economic and social development.

Small absorption capacity can either be due to the small size of an economy (lack of labor force, skills, infrastructure etc.) or prevailing inefficiencies within the economy. Since Mozambique has limited capacity, investments can rapidly become ineffective: only so many roads and bridges can be built at the same time, only so many doctors and teachers trained.

This situation is comparable to a hospitalized patient that is dependent upon a life-saving drug. The drug is administered through a drip because an overdose of the supposedly life-saving drug could just as much kill the patient.[630] In the same way, pumping huge amounts of money into Mozambique's economy all at once could "overload" the country. In that sense, while poverty eradication and development should be Mozambique's top priorities, the government should exercise caution to ensure that investments are efficient, that inflation is managed, and to mitigate other detrimental effects of rapid investments of natural resource revenues. Public investment needs to be scaled up gradually in line with institutional and absorption capacity constraints.[631]

9.1.3 Saving for Future Generations

Selling one's natural resources is analogous to selling the family silver: a once durable asset is sold and converted into cash, it is no longer a source of secure wealth. A SWF will allow Mozambique to convert its permanent, but finite and depletable resources (i.e. natural gas and coal) into financial assets that generate recurring revenues over long periods of time. Depending on the rate of production and global commodity price trends, Mozambique's gas and coal resources may be depleted within a relatively short period of time. While it is reasonable to immediately invest some of the commodity revenues in order to increase the standard of living of Mozambique's current population, the main objective should be to maintain the fund's value to ensure self-sustaining economic growth for present as well as future generations. Other commodity exporting countries aim to maintain their SWF value (the principal) while only spending its return on assets (the profits, dividends or interest earned on investments – what is sometimes called the *bird-in-hand-approach*[632]). Norway is perhaps the quintessential example of how to best manage a SWF. The country has been able to successfully use the mechanism to guarantee intergenerational equity and provide its population with one of the highest standards of living in the world. If the Norwegian Pension Fund Global were to be distributed today, it would roughly allocate $150,000 to each of Norway's nearly five million citizens.

To be fair, when Norway discovered its natural resources it was already at a much higher level of development than Mozambique is today. Mozambique can look to Botswana – another sub-Saharan African country – or Timor-Leste for more pertinent comparison studies.

Botswana: The Pula Fund

Botswana's Pula Fund is a long-term investment portfolio that was established in 1994 to preserve parts of the income stemming from diamond exports for future generations.[633] The fund has successfully increased its value in real terms ($6.9 billions by the end of 2012, or roughly 50 % of GDP) due to high revenues stemming from diamond exports, recurring positive balance of payments, and high returns on investments. Any resources from extraction that the government cannot invest in productive domestic investments are transferred to the Pula Fund.[634] Additionally, the Pula Fund takes on a stabilization role: During the global financial crisis the Pula Fund served as a smoothing mechanism to support the government's countercyclical policy response to boost economic growth.[635] As opposed to other countries where the government revenue to GDP ratios are low, Botswana, thanks to the Pula Fund, was able to afford stimulus packages that stimulated the economy and increase GDP growth after it dropped significantly in 2009.

9.1.4 Tapping into International Financial Markets

A SWF is a special purpose vehicle for the successful investment of government assets in global financial markets.[636] The complexity and sophistication of international financial markets, however, often exceeds government capacities. This is the case in Mozambique as it struggles with government capacity in most ministries and government entities. This skill gap can be bridged by investing in assets that are located in a traditional financial center such as London, New York or Singapore, and managed by experienced asset managers. Asset manager professionals can draw on their knowledge and experience of financial markets to provide the fund with benefits from economies of scale (cost advantages due to size). That is, an asset manager will likely have better access to a broader range of investments, and therefore have lower administrative costs because it represents a large number of investors.

Mozambique has an important role to play in deciding how much of the extractive revenues to spend, when, and where these revenues should be spent – and how much should be saved. The strategic direction for the SWF will be completely within sovereign control, but the day-to-day administration should be outsourced. In the case of Timor-Leste's petroleum fund, the Ministry of Finance sets the investment strategy after consultation with the Investment Advisory Board (see *Section 9.6.4: Timor-Leste Continued*), whereas the actual administration of the fund's assets is handled by the investment bank JP Morgan in New York (see *Section 9.2.4: The Lesson to Be Learnt from Timor-Leste*).

Recommendation 91: Draw on the experience of established financial experts to manage the investment of the SWF's assets.

Abu Dhabi Investment Authority

The Abu Dhabi Investment Authority ("ADIA")[637] is a globally diversified investment institution that currently manages about $342 billion in assets that are owned by the Government of the Emirate of Abu Dhabi. ADIA does not invest in Abu Dhabi or the Gulf region for that matter. The majority of its investments are done in North America and Europe and to a lesser extent in developed Asia and the Emerging Markets.[638]

The fund's resources are invested and managed through the ADIA investment department comprising investment experts from all over the world. A Board of Directors that is directly appointed by the ruler of the emirate but that is not involved in investment and operational decisions oversees the fund. 80 % of the fund's assets are managed by external fund managers whose activities are monitored on a daily basis.[639]

While it is recommended that Mozambique outsource the SWF's investment just like Timor-Leste to an investment bank or another reputable institution ADIA's model for investment might be of interest as a long-term goal (see *Section 9.2.4: The Lesson to Be Learnt from Timor-Leste*).

In 2011 Saeed Al Hajeri, executive director of ADIA's emerging market department emphasized in an interview that ADIA's strength lies in the investment staff that it employs. "ADIA devotes considerable time and resources to ensuring that we not only attract the best local and international talent but also that we are able to motivate and retain them." ADIA currently employs staff from over 40 countries. While two thirds of the staff is foreign, one of the fund's priorities is the development of local staff.

"ADIA is firmly committed to developing local talent. Our scholarship program reaches back into United Arab Emirates schools to identify, develop, and track students at an early age who we believe have the potential to be leaders of the future. We actually interview them and conduct psychometric testing at the high school level. From there, we monitor them. We get a quarterly report and have a dedicated department, following up on them and making sure they are doing their studies. Upon graduation, selected students are sponsored by ADIA to attend universities, usually in the United States or Europe, after which an assessment is made by both parties as to their interest and suitability for a career at ADIA."[640] (See *Appendix* Appendix 2A: Abu Dhabi Investment Authority's Manager Selection Process).

Recommendation 92: Instruct a reputable institution to handle operational management for now, but consider building a management team located in Mozambique as a long-term goal. While all assets are still invested in traditional financial markets, this would allow Mozambique to develop and improve its investment management.

9.1.5 The Santiago Principles and the Linaburg-Maduel Transparency Index

The Generally Accepted Principles and Practices ("GAPP")[641], also referred to as the *Santiago Principles,* provide a framework with 24 guidelines for SWFs that reflects appropriate governance, accountability, and investment guidelines and practices (see *Appendix* Appendix 2B: Generally Accepted Principles and Practices ("GAPP") – Santiago Principles). The International Forum of Sovereign Wealth Funds, consisting of 23 IMF member countries, developed these principles in 2008 with the goal of maintaining a stable global financial system and free flow of capital and investments. The *Santiago Principles* call for sound legal frameworks, clearly defined policy purposes, close coordination with domestic fiscal and monetary authority and high levels of transparency. While it is highly recommended for any country with a SWF to fully adhere to those principles, they simply provide a benchmark and are not enough to ensure macroeconomic stability and prosperity for future generations.

Recommendation 93: Adhere fully to the *Santiago Principles*, but do not stop there. These principles provide a benchmark and should not be the end point in ensuring macroeconomic stability.

There have to be obligatory, regular and internal and external audits of the SWF and around the clock information in order to guarantee that the government is pursuing the fund's objectives at all times. The people of a country are the real owners of the fund and have a right to be informed about its performance and progress.

One way of measuring a SWF's transparency is through the Linaburg-Maduell Transparency Index that was developed at the Sovereign Wealth Fund Institute. This index consists of ten essential principals, such as clear provision of a fund's strategy or up-to-date independently audited reports. The compliance with each principal is attributed with a point on the transparency index, awarding the funds with a range from one to ten points. It appears that the index is still being refined and adjusted, however, it provides a good basis on how think about a SWF's transparency (see *Appendix* Appendix 2C: The Linaburg-Maduell Transparency Index).[642]

Recommendation 94: Comply with all ten principals that make up the Linaburg-Maduell Transparency Index. Mozambique shall score full ten points on that index.

9.2 Resource Fund Typology

9.2.1 Budget Support

Budget support or coverage of the budget deficit through natural resource revenues is an important part of a SWF's purpose, especially in a developing country. But even advanced economies such as Norway use the return of investments from their SWF to cover potential budget deficits. Many young countries like Mozambique rely on donor contributions to support their budget prior to resource exportation and the desire to wind down those contributions is only understandable. For accounting, administrative and management reasons, however, all revenues stemming from natural resource production should initially be paid into the SWF. The share required to cover the budget deficit can subsequently be withdrawn from the SWF in compliance with the law specifically enacted for that purpose. This way, withdrawals from the fund are tied to the budgetary process, and therefore to a democratic process. Such a mechanism is another way of implementing checks and balances on withdrawals from the fund.

To prevent inflation, it is important that a country does not increase its budget expenditures disproportionally or too quickly. The danger of limited absorption capacity (see *Section 9.1.2: Absorption Capacity*) and the resulting inefficiencies in investments have to be kept in mind when planning the following year's budget. The contributions from the SWF are supposed to lift a country out of donor dependence and not to simply increase budget expenditures. For larger development projects, such as transmission lines or a hydro dam, a separate development fund or a separate development account within the SWF should be established. The development fund would be physically separate from the budget but tied to Parliamentary approval and in line with the national development strategy.

Recommendation 95: For accounting, administrative and management purposes, all revenues flowing from natural resource production should be paid directly into the SWF, and later distributed for different purposes such as budget, development, stabilization or savings. All withdrawals from the fund are subject to specific legislation or Parliamentary approval.

9.2.2 The Stabilization Fund

Commodity price volatility is the most dangerous aspect of commodity exports for emerging market economies, particularly if those exports make up a large share of GDP. Governments have a tendency to expand government expenditure during commodity price booms, when income is more freely available. Rapidly scaling down those expenditures during downturns or busts is usually very painful and comes with high costs such as unemployment or further economic contraction due to decreasing government spending. Aside from price volatility, there may also be volatility in the volume of output due to socio-political unrest, strikes or global demand shifts.[643] Additionally, many developing countries have limited access to international capital markets that could help them get through time periods when prices or supplies are low.

Research suggests that countries that rely on commodities with more stable prices such as industrial metals show stronger growth than countries that rely on commodities with high price volatilities such as oil or gas. In Nigeria or Venezuela, swings in oil prices triggered the *Resource Curse* or exacerbated it significantly.[644] It is therefore crucial that a resource-dependent country establishes a stabilization fund. This is a fund that manages price shocks to revenue gathering commodities, in order to preserve domestic macroeconomic stability and smooth consumption. When commodity prices are high, the fund will expand but it can be drawn on to supplement and smooth government expenditures during times of low commodity prices.

A stabilization fund is a useful alternative to international loans. International lending is usually pro-cyclical and tends to dry up (or become very expensive) when the global economy is on a downward spiral – when funds are most needed in developing countries. To a certain extent, the stabilization fund can function as a lender of last resort that buffers the economy from a variety of macroeconomic shocks.[645] One of the provisions of the stabilization fund could enable withdrawals from the fund in the case of natural disasters or a global economic downturn that affects the entire economy.

In order to establish a stabilization fund, and to determine what proportion of commodity revenues should be contributed to it from time to time, a reference price has to be established. There are usually two approaches: a benchmark price can be set either by using a price-smoothing formula (mostly a combination of historical and forward-looking prices) or by an independent committee. The former price-setting formula mechanism is more common.[646]

Chile: Pension Reserve and Social and Economic Stabilization Fund

One of the most sophisticated stabilization funds is Chile's Copper Stabilization Fund. Established in 1985, the fund's accumulation and withdrawal rules are based on a reference copper price that is determined through an inclusive process involving the authorities and external experts.[647] The establishment of the fund, for example, effectively helped the government resist expenditure pressures during the upswings in copper prices in the late 1980s and mid-1990s. It would have been very conductive to increase government spending during times of high copper prices and only natural for people and political groups to demand so. The provision to skim those windfall profits off, however, and to direct them into the stabilization fund for times of low copper prices made such spending increases impossible.

The stabilization fund will only be effective if the government adheres to the initially set out rules. If the fund's rules are by-passed and discretionary withdrawals are made, then the stabilization fund will lose its purpose and impact. This was the case in Venezuela, where a stabilization fund that was set up in 1998 included sound rules for volatility management. These rules were subsequently amended and rendered the stabilization fund ineffective.[648]

Since a stabilization fund must have readily available funds in the event of price shocks, most of its assets are fairly liquid so that they can be cashed in quickly. This also implies that a stabilization fund's assets are risk-averse, short-term in nature and fairly liquid, such as actual cash or US treasury bills. In line with the arguments mentioned above, a stabilization fund is most effective when it is held in foreign assets in order to minimize the risk of exchange rate appreciation.

Recommendation 96: The Mozambican SWF must incorporate a stabilization mechanism to protect the country from fluctuation in natural gas and coal prices.

9.2.3 The Development Fund

After establishing a stabilization fund to counteract the potentially detrimental effects of commodity price fluctuations, a developing country will want to invest part of its revenue into specific projects in infrastructure, health or education to accelerate development. One or more development funds can be created in order to earmark revenues for specific development projects. The development fund, however, should not take over responsibilities that are already allocated to the state institutions and therefore to the budget. In other words, it should not be spent on consumption but on long-term projects such as transmission lines, the construction of a hydro dam or long-term education reforms and programs. These investments are most effective when they contribute to the diversification of the economy. In this way, they facilitate growth in the local economy and improve the overall investment climate in the country. In general, the development fund operates like any private equity fund and makes investments based on a risk-return analysis.[649] However, the fund can (and should) also take non-economic outcomes into account when it is planning and assessing the success of an investment. This means that the country can choose to value certain types of "return" in favor of others – for example, by taking into account the overall welfare gains brought by investments made in education, including increased productivity, social cohesion and stability.

Mubadala Development Company

The Mubadala Development Company is a development fund established in 2002 that is fully owned by the government of Abu Dhabi (although, technically it does not consider itself a SWF). Its main mandate is the diversification of Abu Dhabi's economy by investing in key social infrastructure. Its investments are not only supposed to generate commercial profit but also social returns. The Mubadala Development Company manages long-term, capital-intense investments that deliver strong financial returns and tangible social benefits for the Emirate.[650]
One of its most successful investments is the Imperial College London Diabetes Centre that opened in 2006. It is fully owned by Mubadala and has showed strong growth in patient consultations since then. Another example for a successful investment is Strata, an aircraft-parts making plant in Al Ain (second largest city in the Emirate of Abu Dhabi), that also been making significant progress.[651]

While earmarking might make it easier to resist political pressure to use the resource revenues for less appropriate purposes, there is still a danger that the fund will be directed to inefficient projects, and that resources could be misused.[652] As discussed above, the absorption capacity of a domestic economy has to be taken into account when making investment decisions. In order to maximize the impact of investments, and to avoid potential rent-seeking behavior, the development fund should be tied to the budgetary process, with high legal standards for spending. Transfers to the development fund must be subject to Parliamentary approval and in line with the national development strategy (see *Section 9.2.4: The Lesson to Be Learnt from Timor-Leste*). In order to identify investment opportunities for the development fund, established frameworks for impact investing should be consulted.[653]

Recommendation 97: Mozambique will require significant investments in infrastructure and social projects. Parts of the Mozambican SWF should be used to target specific long-term investments that diversify the economy while taking its limited absorption capacity into account.

9.2.4 The Savings Fund

The savings fund is the core of the SWF for resource exporting countries and should ultimately be its main purpose. As mentioned above, selling natural resources is comparable to selling a country's assets, its patrimony. To make sure that future generations will benefit from the revenues of presently sold national assets, those revenues have to be converted into productive capital that generates recurring revenues. Any shares of resource revenues that aren't immediately needed for stabilization or development purposes should be channeled into the savings fund so that the stock of wealth can gradually build up. In this way, current wealth will be shared with future generations. The savings fund is what ensures intergenerational equity.

While returns on assets can be channeled back into the economy (through the budget) the principal will remain intact so as to maintain the fund's value – or increase it through recurrent revenues from commodity sales. The savings fund works under a *permanent income framework* that allows the government to consume up to the real interest (adjusted for inflation) received on the investments on an annual basis. By leaving the principal untouched, ideally the fund will generate *permanent income* through interest earnings. That framework can be expanded or adjusted to account for growth of the population and changes in market risks or other factors such as level of public debt, the economic cycle and financing constraints.[654] The savings fund is able to bear considerable risk (compared to the stabilization fund) in its investment since it generally bears a long-term investment perspective.[655] Thus, it is not surprising that a mature SWF such as Norway's Government Pension Fund Global even invests in real estate.

Government Pension Fund Global

Norway's Government Pension Fund Global was set up in 1990 to ensure the intergenerational transfer of assets that accrue from national oil and gas production. At the end of 2012, the fund held over $715 billion (Norway's GDP in 2011 was $486 billion). The fund is fully integrated into the budget, with only the fund's real return being used to cover budget deficits, which is approximately 4 %. All of its assets are held abroad and the Norwegians follow a highly transparent investment strategy.[656]

The Lesson to be Learned from Timor-Leste

The Democratic Republic of Timor-Leste (or "East Timor") is a small state that was finally recognized as an independent nation in 2002 after over 20 years of Indonesian occupation and civil war. Virtually the entire infrastructure was destroyed in the course of the war and many lives lost. The new country emerged entirely dependent on foreign aid.

Following discoveries of large oil and gas reserves, Timor-Leste established a Petroleum Fund in 2005. The fund was conceived with the help of the IMF and Norway and enshrined in the Petroleum Management Law.[657] All revenues from the petroleum production go directly to the fund, which is managed by investment bank JP Morgan in New York. JP Morgan invests the funds according to the investment strategy set out by the Ministry of Finance. Similarly to the Norwegian Government Pension Fund Global, the Timor-Leste Petroleum Management Law established an Estimated Sustainable Income ("ESI") formula that was intended to maintain the value of the principal while distributing the returns on assets back into the budget for deficit funding. In 2009, the ESI allowed for 3.8 % of the oil and gas wealth (of the total worth of the SWF at that time) to be distributed to the budget. Under the ESI those 3.8 % are equal to the interest gained on the fund's total value, therefore the withdrawal of that amount will not reduce the principal. In 2010 the distribution totaled 4.8 %, similar to Norway's payout. In 2012 the fund grew to $11.8 billion, with $586.0 million transferred back to the budget.[658]

Timor-Leste, however, is not comparable to Norway in terms of its level of development. It came as no surprise then, that the citizens of one of the pacific region's poorest countries demanded more investment in the country's development. In 2010/2011 the government reacted with the legal establishment of two development funds, the *Human Capital Development Fund* and the *Infrastructure Fund*.[659] Both these funds were designed to enable multi-year investments for critical, capital intensive projects that target poverty alleviation and diversification of the economy. The Infrastructure Fund for example is only investing in projects worth more than $1 million.[660] This new fund structure allows Timor-Leste to save parts of its petroleum revenues, while kick-starting its economy through specific investments in long-term development projects.

Adjustments to the Timorese conditions were certainly necessary, but it should be mentioned that several actors have criticized the earmarking of funds. As mentioned above, a very rigorous legal environment and close ties to the budget are required in order to avoid inefficient expenditures and rent seeking. In the case of Timor-Leste withdrawals from the petroleum fund may only surpass the ESI after they have been approved by Parliament.

East Timor is an interesting case for Mozambique due to historical and current similarities between the two countries. While its case is not perfect and cannot be applied 1:1 to Mozambique, the East Timorese approach to the creation of a legal and regulatory framework for the management of extractive industries revenue can certainly be of inspiration to Mozambique.

Recommendation 98: Make sure that the Mozambican SWF incorporates a solid saving mechanism. While development and budget support will be (and should be) predominant in the early years of natural resource production, the ultimate goal of the SWF is saving for the future and the generation of recurring revenues.

9.3 Status Quo in Mozambique

The bulk of extractive revenues are expected to flow once the natural gas production in the Rovuma Basin starts, probably around 2018/19. There are, however, other extractive industries such as aluminum and coal that are already exporting resources. Aside from revenues from these exports, Mozambique has also received payments in the form of signature bonuses or capital gains taxes (at least in the case of the 2012 sale of a stake by Anadarko). Currently, the windfall revenues from sales of shares in hydrocarbon industries are placed in an account at central bank and are automatically converted into reserves. While the government has discretion to withdraw these reserves to increase public spending, in case these resources are not used for debt servicing or to increase spending in projects that had limited fiscal space in the budget the government must provide a supplementary budget. The amount of $175 million from windfall revenues in 2012 was used to pay outstanding domestic debt and to increase fiscal space in priority sectors, primarily on health and infrastructure.

From conversations during our visit to Maputo in March 2013 and from the 2010 Extractive Industries Transparency Initiative ("EITI") report [661], we learned that most of the revenues from the extractive industries so far have been collected by the General Directorate of Taxes, specifically through the Large Taxpayer Unit and Tax Areas. In some circumstances, however, money is paid directly to the regulator Instituto National de Petroleo ("INP") at the time of the signature of the contracts and the Ministry of Finance. It is not clear how this money is allocated or spent.

9.4 The Sovereign Wealth Trust Fund

THE SOVEREIGN WEALTH TRUST FUND. THE KEY TO SUCCESS IN COMMODITY REVENUE MANAGEMENT, 2013
Bettina Strickler

Under the common law legal system a trust constitutes a relationship that emphasizes the rights of the beneficiaries and reaches a protection of the latter through a solid legal basis. Although it is not yet a widespread practice with natural resource funds, the conversion of a resource windfall into a trust fund features many advantages that make it a desirable new best practice.

Contrasted with other funds that are classified as legal persons, a trust fund is a legal relationship where property is transferred from one party (the settlor) to another (the trustee) that holds it for the benefit of a third party (the beneficiary).[662] The settlor creates the trust, determines its legal terms, and usually provides the initial capital for the trust fund. In the case of a natural resource producing country the settlor is the government of that country, the trustees are a carefully selected group of people that represent the broad spectrum of the population, and the beneficiaries are the people of that country (or state). The trustee takes legal title to the content of the fund, which seemingly means complete ownership, but the trustee does not have the right to receive any benefits from the property. Instead, the trustee owes "fiduciary duties" to the beneficiaries. This means that the trustee is bound to act in good faith, in accordance with the terms of the trust instrument or deed, and not in the trustee's own interest. The trust instrument will usually set out clear guidelines about how that the trustee should manage the trust's assets. Trustees usually select, hire and monitor the various service providers who help manage the fund's resources.

Private trust funds are a way of preserving capital while making the income from the capital available to designated persons or purposes. Public trust funds function similarly, but they are established for public purposes by governments through form of enacting legislation that forms the trust, sets out its legal terms, and assigns respective rights and responsibilities to different parties.[663]

One of the most significant benefits of a trust is the ability to partition and shield assets from the settlor creditors. Under other circumstances creditors have the possibility to obtain what is owed to them through a court decision resulting in the seizure of assets. In the case of a trust fund, however, a creditor cannot seek legal seizure of the fund's asset, which is an effective protection of the beneficiaries' assets. The trustee's powers are wholly fiduciary in nature. Any exercise or failure to exercise a fiduciary power is subject to the supervision of the court. Beneficiaries must have enforceable rights against a trustee and be able to hold him to account.[664]

As mentioned above, there are only few countries that have chosen a trust fund legal structure to manage their natural resource revenues. Within the United States Alaska approved an amendment of the state's Constitution in 1976, which established the Alaska Permanent Fund as a trust fund to accommodate revenues from oil and gas production. This means that any future change in the fund's structure will effectively require constitutional amendments. In 1980, the legislature established the Alaska Permanent Fund Corporation that is overseen by a six-member Board of Trustees to manage the fund investments.[665]

The trust fund is particularly instrumental for countries with a relatively high debt level that might have been difficult in the past to sustain. Timor-Leste was virtually debt free following its independence in 2002,[666] which meant it was not essential to establish the sovereign wealth fund as a trust fund. While Mozambique's debt distress levels are currently classified as low,[667] the constant current account deficits and increasing indebtedness could become problematic in the future. The next five to ten years will require significant investments from the Mozambican government while donor contributions decrease, since the large share of revenues from LNG exportation is not projected to flow in until at least 2018. This is likely to result in higher debt levels in the interim.

The Alaska Permanent Fund

Alaska approved an amendment of their state constitution in 1976, which effectively established the Alaska Permanent Fund to accommodate revenues from oil and gas production. This means that any future change in the fund's structure will effectively require constitutional amendments. The fund is set up as a trust that receives 25 percent of all royalties and other direct income accruing from Alaska's oil production, the principal of which can only be placed into income generating investments.[668] When taking into account that a substantial amount of revenues from oil production are generated indirectly though taxation then an average of 10 to 15 percent of total income from oil flow into the permanent fund, the rest is directed into a general fund that supports the ordinary expenses of the state.[669] A developed economy such as Alaska's has more economical space to accommodate such a large share of the revenues in a government account. This is not recommended for smaller, open economies, in particular developing economies.

The Alaskan fund is a trust fund that is held *on trust* in the name of the beneficiaries, the people of Alaska, by a board of six trustees that are appointed by the Governor of Alaska. The trustees oversee the Alaska Permanent Fund Corporation that manages the fund's investments and administers the Permanent Fund Dividend Program. The dividend program allows for a substantial part of the income earned on the fund to be distributed to qualified Alaskan residents.[670] The purpose of the program was to increase the public's involvement and interest in the fund and to redistribute financial gains. The dividends reached an all time high in 2008 with just above $2,000.

The constitutional amendment paired with the Dividend Program increased the citizens' awareness of the fund and maintained their interest in its performance. While such a dividend program might not be feasible in less developed countries, due to lack of census data or technical capacity, it is a very effective means in a developed and democratic system to increase people's awareness and with it external checks and balances.

The Alaska Permanent Fund has been very successful in maintaining the trust fund's value while distributing gains from financial returns back to the people of Alaska. It is a textbook example of how non-renewable resource wealth can be transformed into permanent wealth.[671]

9.4.1 A Sovereign Wealth Trust Fund for Mozambique

The establishment of a sovereign wealth trust fund will support Mozambique's socio-economic development and political stability, as the following discussion will demonstrate. The government of Mozambique will act as settlor of the trust, while a Board of Trustees will be composed of a representative group of Mozambicans and other experts. The people of

Mozambique, including its future generations, would be the beneficiaries. To incorporate the general benefits of a SWF, such as currency stability, the trust should be placed in an established international financial center chosen by the government.

The trust will bear double benefits for the people of Mozambique. First, the investment of the fund in foreign assets will shelter the domestic economy from detrimental fiscal effects of natural resource exports and, second, the nature of the trust itself provides a legal guarantee for the trustees to act in their best interest.

Mozambique, like many other developing countries, has struggled with servicing its debt in the past. It has gone through several rounds of debt-forgiveness over the past two decades.[672] Given this history and the potential for increasing levels of indebtedness discussed above, it is a reasonable concern that the establishment of an offshore SWF would leave the country vulnerable to forced debt collection or asset seizures. The seizure of an Argentinian ship off the coast of Ghana due to outstanding Argentinian debt in October 2012 has increased such preoccupations. Through the establishment of a trust fund, however, a Mozambican SWF would be insulated from sovereign debt. Any claims by foreign countries on the SWF would not hold before court.

A trust fund offers the highest legal standards of protection available and will help alleviate some of the concerns that have been expressed vis-à-vis the investments of SWFs. In the past, SWFs have had limited access to certain financial markets due to a lack of transparency and governance standards.[673] When the Mozambican SWF is set up as a trust fund, it will adhere to the highest standards that allow it to access the best financial markets and compete with the private sector. This will effectively increase its return on assets.

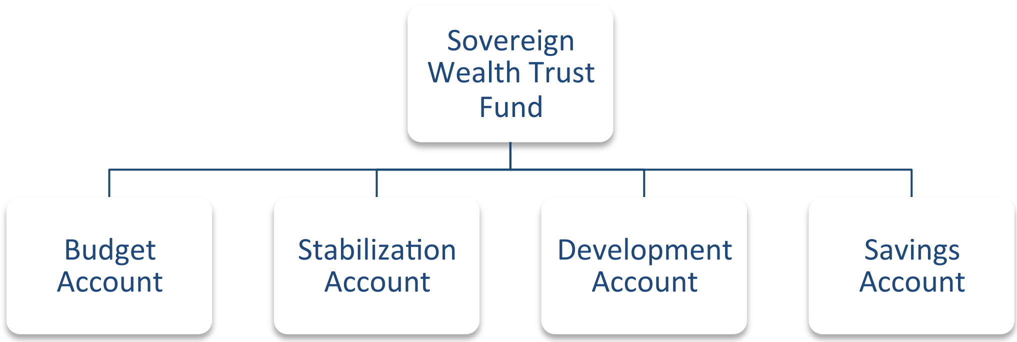
The trust fund remains sovereign, but legally enshrines its purpose and becomes a dedicated fund. Such a solid structure will increase confidence in Mozambique's system and economy and will ultimately benefit the country's investment climate, thereby leading to increased foreign direct investment.

Recommendation 99: Mozambique's SWF should be set up as a trust fund to benefit from the highest standards of legal protection, access to financial markets and protection from creditors.

9.5 A Sovereign Wealth Trust Fund Structure for Mozambique

To ensure revenue maximization in Mozambique, we propose the following sovereign wealth trust fund structure:

All mining and oil and gas companies will pay the royalties, taxes and any other dues they may have directly into a sovereign wealth trust fund located in a traditional, well-established financial center such as London, New York or Singapore (for the above-mentioned reasons). This trust fund will contain four or more separate accounts that are allocated different functions: a budget account, a stabilization account, a development account and a savings account. Adding a budget account recognizes the fact that thus far Mozambique has not been able to raise enough tax revenues to replenish its entire budget. Uniting all four accounts under the same trust fund will facilitate accounting and oversight, while lowering administrative costs. At the same time, it is vital that each account is managed in accordance with different criteria, with different decision-making processes to take into account the different purposes of the accounts. For accounting and transparency purposes, each account must clearly state the share of revenues stemming from coal exportation and the share stemming from natural gas or petroleum production and exportation.



The replenishment of the different accounts should happen in a cascading manner. Budget support and stabilization of the economy have to be prioritized. Due to the large and imminent financial impact expected from natural gas production, these two funds should be replenished fairly early. It will subsequently be important to increase the development account following Parliamentary approval and to start investments in projects that diversify the economy and increase domestic capacity. Ultimately, any revenues that are not needed in the budgetary process, for stabilization matters or for specific development projects should be saved in the savings account. The revenues that will accrue from financial investment of the savings account can then be fueled back into the budget. The ultimate goal is to build up the savings account. Over time, as the country builds its other sectors, and generates more tax revenue, Mozambique will no longer need the budget or the development account and will be able to manage its resource wealth through a stabilization account and a savings account.

While a solid legal basis with clearly stated inflow and outflow rules is crucial for the fund's success, studies suggest that funds with flexible rules tend to be more effective than funds with fixed rules.[674] Even with some granted flexibility there have to be clear withdrawal limits to prevent the depletion of the fund. Since market realities and macroeconomic indicators change over time, the laws enshrining Mozambique's sovereign wealth trust fund need to be able to take these new realities into account.

In the process of establishing a SWF for Mozambique, public awareness and involvement will be very important. The public needs to be well informed about the benefits and obligations of the SWF. This can also help to create a sense of ownership and pride among Mozambicans.

In line with the trust fund's protection against debt collection, it should not be permitted to borrow against the fund. This will protect Mozambique against increased borrowing during times of high commodity prices, that might not be sustainable once commodity prices fall and could effectively lead to a debt crisis.

Recommendation 100: To accommodate Mozambique's current socio-economic situation the sovereign wealth trust fund should include four separate accounts: a budget account that supports the budget, a stabilization account to protect against price fluctuations, a development account to invest in infrastructure and social projects and a savings account to ensure that future generations will also be able to benefit from the fund.

9.5.1 The Budget Account

The budget account shall replenish Mozambique's budget that has thus far been bolstered by donor contributions. In 2012, the donor community sustained almost half of the Mozambican budget.[675] While Mozambique's independence from foreign aid is a long-term priority, we recommend a gradual replacement of funds stemming from donor countries with commodity revenues. This will allow the economy to gradually adjust to the new circumstances. Currently, revenues from extractive activities (coal production started in 2012, and there are existing smaller scale onshore natural gas productions in the southern part of Mozambique) are flowing into government accounts. These could immediately be directed into the sovereign wealth trust fund and subsequently fueled back into the budget. Once massive revenues from natural gas production start flowing in (expected 2018/19) the budget account will experience rapid growth. As soon as the budget account has reached the level of the projected budget contributions, any overflows will go into the adjunct stabilization account.

9.5.2 The Stabilization Account

Mozambique's stabilization account will fulfill the same tasks as the stabilization funds described above. Given the fact that the larger share of resource revenues are expected to originate from natural gas production, fluctuation in natural gas prices will have a higher impact on Mozambique compared to fluctuations in coal prices. Historically, natural gas prices have experienced high volatility. Thus, establishing a solid stabilization mechanism is very important. During periods of high commodity prices, the account will expand until it reaches a certain threshold that is pre-determined and enshrined in the law. Funds that exceed this threshold will be directed into the development account or the savings account. In the case of a price shock, funds may be withdrawn from the stabilization account. The development or the savings account, however, cannot be touched in such an event. By drawing on the stabilization account in times of low natural gas prices (or coal prices), the government can avoid painful spending cuts or increasing taxes, which could potentially affect GDP growth. These, however, are general guidelines that will have to be studied further and adjusted to suit Mozambique's fiscal environment.

The International Monetary Fund ("IMF") has been advising resource rich countries on tools regarding macroeconomic stability. During its mission visit to Maputo in 2012, the IMF advised the government of Mozambique, in particular the Budget Directorate, on how to deal with price fluctuations. In a conversation with the IMF in Maputo in March 2013 we were told, that while the IMF is in favor of a SWF in Mozambique (and it is likely that it will become more vocal about this in the near future), the government currently lacks the capacity to deal with this matter.

This is why engagement with experts on this field will be important in the near future. Implementing a macroeconomic policy framework to deal with price volatility would only provide a Band-Aid-type solution. Rather than spending time and resources on such a short-term measure, the government of Mozambique should partner with advisors and donors to take this opportunity and implement a solid stabilization mechanism through a SWF.

An important matter for the stabilization account that is still uncertain is the pricing that is built into the contracts for LNG exports. In conversations with the Tax Authority and the Budget Directorate also in March 2013, we learned that this question has not been answered definitely.[676] Currently, LNG is sold through long-term export contracts that are linked to oil prices. With worldwide LNG supply and demand on the rise it is possible though that an LNG trading hub will develop. Such a hub would allow trading LNG at a spot price. When setting up the stabilization account, these pricing uncertainties have to be accounted for. Depending on the way LNG prices are integrated in the various contracts, the price formulation of the stabilization account contribution will have to be adjusted.

9.5.3 The Development Account

Due to Mozambique's lack of infrastructure and human capacity, the country's sovereign wealth trust fund should have an account that enables investments in large-scale development projects. This development account should be conceived with a purpose-built design that holds assets offshore until a certain investment becomes viable.[677] As mentioned above, the country has limited absorption capacity that can render investments inefficient. While the economy grows, and with it its absorption capacity, the government can scale up investments. A development account will support a rigorous development strategy and mitigate the detrimental effects of exponential increases in investment such as inflation. Its guidelines and governance must be organized in line with the national development strategy. The development account will significantly contribute to the development of the country and the diversification of its economy while shielding it from inflation or *Dutch Disease*.

The development account has to be conditioned by Parliamentary approval to ensure democratic spending processes. However, it should not be used for spending that is usually supported by the regular budget process. The spending rules have to be clearly stated, legally supported and highly regulated. One option would be to look at the various frameworks used to assess the viability, performance, and impact of social, environment and infrastructure investments by other governments, by international organizations, and by private investment funds. For example, the *Impact Investment* approach, developed in 2008, uses a system of management information systems, impact ratings or performance standards, and standardized definitions of impact performance measurements to measure the social and environmental impact of investments.[678]

In order to account for the regional differences, in particular the differences between the regions of Mozambique that produce the natural resources and the ones that do not, the establishment of regional sub-accounts should be considered. That way, equitable distribution of the resource revenues according to needs and contributions can be facilitated.

9.5.4 The Savings Account

The savings account is the heart and soul of Mozambique's sovereign wealth trust fund. The ultimate goal is to stock it with a large proportion of the natural resource revenues so that future generations will benefit as much as possible from the country's current windfall. While a replenishment of the budget and the stabilization account are crucial for the current state of the country, the accrual of the development and the saving account should happen simultaneously. While the development account will help to make investments now that create better living conditions and a more vibrant economy for future generations, the savings fund will help to ensure economic security and independence for Mozambique in the future. Eventually, when Mozambique has progressed significantly, the budget and the development account will become redundant and the Mozambican sovereign wealth trust fund will consist of a stabilization and a savings account.

9.6 Management Structure for Mozambique's Sovereign Wealth Trust Fund

9.6.1 Trustees

The trustees of the Mozambican trust fund will hold the fund for the beneficiaries, the people of Mozambique. They take legal title to the content of the fund, which they hold *on trust.* This means that, rather than having "complete ownership" of the assets, they have a number of important duties, and restrictions. The trustees do not have the right to receive any benefits from the property. Instead, the Trustees owe "fiduciary duties" to the beneficiaries (see *Section 9.4:* The Sovereign Wealth Trust Fund).

The trustees should include a diverse group of Mozambicans that have an excellent reputation, proven integrity and loyalty to their country. As a group, these trustees need to have management experience and a thorough understanding of domestic politics, the economy, and international financial markets. Ideally, the Board of Trustees will include current and former heads of state, current and former ministers and governors (in particular the Minister of Finance and the Governor of the Bank of Mozambique), alongside economists, social investment and development specialists. Additionally, suitable international figures that fulfill the high standards of integrity and loyalty can be included in the board.

The trustees usually select, hire and monitor the various service providers who manage the fund's resources. It is therefore very important that the trustees themselves have a good understanding of the international financial markets and its actors.

The Board of Trustees answers to Cabinet and the Parliament but it is not a political institution. There should be clear assignment of responsibilities and unambiguous accountability for the fund's performance.

Recommendation 101: Follow the highest legal standards for the selection process of trustees along with setting clear rules for their responsibilities and range of action.

9.6.2 Management

The Board of Trustees will determine the management structure of the sovereign wealth trust fund. However, in order to fully tap into international financial markets the fund's management, whether it is a specific institution or a group of managers specifically created for that purpose, should be located in a traditional, well established financial center such as London, New York or Singapore, at least for the time being. These markets have clear and robust legal protections for financial services, so that the managers will be required to provide appropriate disclosure, performance updates, and be accountable for their decisions. Not only will this provide the Mozambican trust fund with a solid legal basis, it will also allow it to increase its return on assets (particularly important for the savings account) due to the proximity of such sophisticated financial markets.

The investment strategy should be defined in collaboration with the Ministry of Finance and Banco de Mozambique to preserve macroeconomic stability. In the case of Timor-Leste, the Ministry of Finance, which has the obligation to consult the Investment Advisory Board, elaborates the investment strategy. The Investment Advisory Board develops benchmarks, desired returns and appropriate risks (see *Section 9.6.4: Timor-Leste Continued*).[679]

Recommendation 102: Define and legally enshrine a governance structure that determines the investment strategy and the responsibilities of the fund's management.

9.6.3 Audits

The Mozambican trust fund will require a tight system of audits consisting of two annual audits, one potentially carried out by the Administrative Court and the other by an internationally recognized auditing firm. Each audit should be published and accessible to Mozambicans.

Outside of the Ministries directly responsible for extractive industries, the Administrative Court and the Ministry of Finance are currently mandated to provide oversight for extractive industry revenues. The Administrative Court, headed by its Tribunal Supremo Administrativo, has the role of oversight through its mandate to audit public revenue and expenditure[680] in the court's Third Section (Terceira Secção). While certain factors such as lack of funding, available dedicated staff, and technical skill development are currently restricting the court's capacity, its mandate makes it the best option for the sovereign wealth trust fund's audit.

Recommendation 103: Establish a tight reporting and auditing system for the sovereign wealth trust fund. Determine an established, highly reputational, international auditing firm to conduct at least one audit of the fund per year. Additionally, we recommend that the Administrative Court be in charge of the domestic audit. In order to ensure excellence capacity building has to be undertaken within the Administrative Court.

9.6.4 Oversight

It is recommended to tie an oversight commission to Mozambique's SWF. This commission would be established by law and endowed with administrative and financial independence to ensure its effective role. It should have investigative and sanction powers.

Timor-Leste Continued

Timor-Leste has developed a system that provides transparency, accountability, and checks and balances through regulating the three main operations of the SWF (1) investment strategy (2) monitoring and reporting and (3) budget appropriations from the SWF.

An investment strategy for a SWF is constantly updated to adjust to market opportunities. In order to regulate this aspect of a SWF, Timor-Leste developed a framework that requires the Minister of Planning and Finance, who oversees overall SWF management, to consult an Investment Advisory Board before making any investment decision. The Investment Advisory Board is composed of the director of the Treasury, head of the Central Bank, and three individuals appointed by the Minister in charge of finances, two of which must meet competency requirements. The inclusion of multiple agencies advising on investment strategy has seen Timor-Leste's SWF increase by roughly 57 % a year from $0.5 billion in 2005, to $11.8 billion in 2012.

Timor-Leste has also developed a reporting system that requires various agencies to submit multiple reports throughout the year. The Central Bank is required to prepare quarterly reports on fund performance, and the Treasury Department is required to present quarterly accounting reports. Additionally, an internal audit of the SWF is also undertaken twice a year, and an annual report that synthesize all reports during the fiscal year is prepared by the government and presented to Parliament. Furthermore, the annual report is available in several languages on Ministry of Finance's webpage. This reporting process allows for the government and public to be aware of how the fund is being managed. If the government finds the fund is being managed poorly it can then take action to address deficiencies through re-examining its investment strategy and personnel.

Timor-Leste also created a body called the Petroleum Fund Consultative Council ("PFCC") to ensure that Parliament is using funds in a manner that benefits Timor-Leste in the present and future. Members of the PFCC are selected from a broad representation that includes former high government officials, appointments from parliament, as well as appointments from civil society, religious organizations and the private sector. The PFCC submits its advice to Parliament whenever funds are appropriated from the SWF to the government budget. Parliament then releases the advice from the PFCC advice to the general public.

Through combining these general regulatory structures, Timor-Leste has developed a SWF that is transparent, independent and well reported. Similar structures must also be included in Mozambique's SWF.

Recommendation 104: Establish an oversight mechanism that represents a cross-section of Mozambique's society, including members from major political parties, civil society, the private sector, religious and community leaders and ethnic minorities.

9.6.5 Legal Adjustment

All of the above mentioned should be enshrined in a specifically created law that clearly states the rules, the purposes and the objectives of the Mozambique's sovereign wealth trust fund, the trustees, the roles of different institutions such as the Ministry of Finance or the Central Bank, the Auditors and potential oversight commissions. Any information about the fund's investments and the investment performances must be made publicly available and updated regularly. Professional management, legal underlining, rigorous audits and oversight and public support will be crucial for the fund's success.

Recommendation 105: All aspects of the aforementioned recommendations on the sovereign wealth trust fund should be subject to a democratic consultation process and codified into law.

Notes to Section 9

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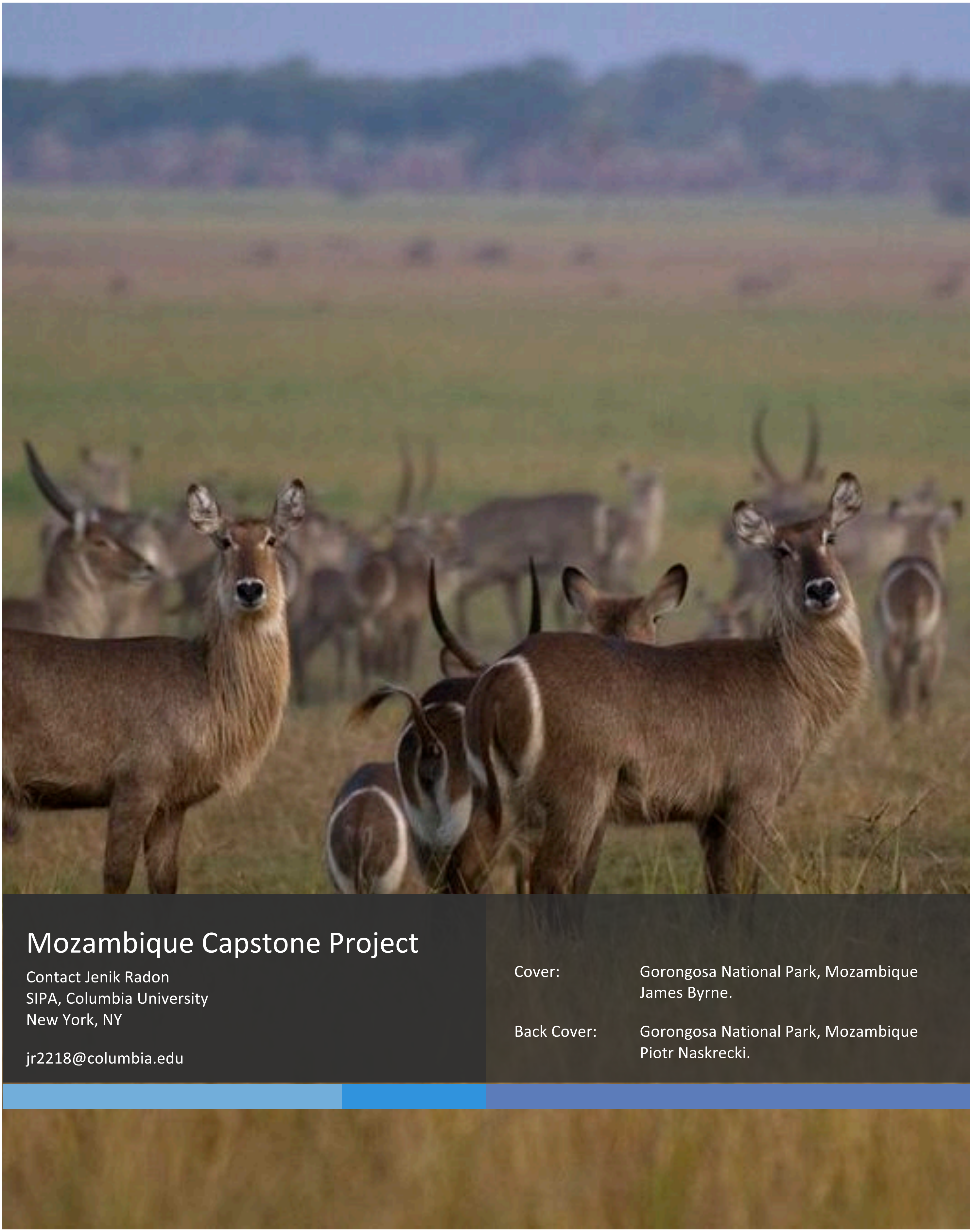

Mozambique Capstone Project

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