

## 5

### Challenges and Opportunities

#### 5.1 Making Oil and Gas Wealth Work for the Poor

This chapter examines the challenges and opportunities for turning oil and gas resources into economic wealth to alleviate poverty in Africa. The discussion focuses on providing a platform that will allow for pursuit of the *best opportunities in the future* to fully harness wealth from oil and gas resources.

At the regional level, the energy demand-supply balance situation in Africa is positive: Given the region's total energy resource endowment, substantially higher oil and gas consumption can adequately be met with regional supplies—with ample surplus still maintained for export. Despite this seemingly optimistic outlook, the country and sub-regional realities reveal multidimensional issues and challenges confronting expanded access to oil and gas in Africa (AU, 2007).

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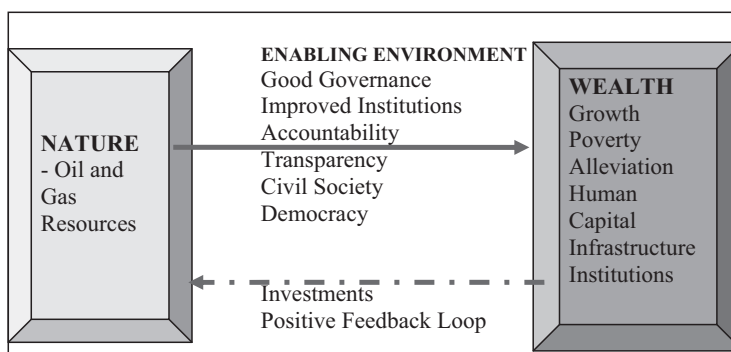
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Addressing the issue of volatile and high oil prices calls for a holistic approach; both the short- and long-term dimensions of the likely economic and social impacts must be addressed. The short-term considerations include how to manage the immediate impact of higher oil prices. This has been the preoccupation of several net oil-importing countries in the region. However, exploring the short-term issues without adequate consideration of medium- and longer-term issues puts these countries at risk of being perpetually trapped in a low-level energy and low-growth equilibrium. The other considerations are medium- to long-term in nature and concern economic, institutional, and organizational considerations required to pursue the important goal of achieving expanded access to oil, gas, and other energy forms in African countries (AU, 2007). The following sections address these issues in greater detail.

### 5.2 Oil and Gas Wealth and the Enabling Environment

Making rational choices about oil and gas resources is central to making natural wealth work for the poor and to maximizing the contribution that the resource endowment can make to social and economic development in Africa. Three key elements—(1) environment and nature (oil and gas resources); (2) wealth; and (3) the enabling environment (governance, institutions, and power structure)—and their relations provide a useful

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**Figure 5.1:** Process of Transforming Oil and Gas Resources into Wealth

Source: Authors.

framework for discussing how wealth from oil and gas resources can enhance development and chart a path forward (see Figure 5.1). Experience in Africa and elsewhere demonstrates that policies and investments that recognize and integrate these three elements yield positive development outcomes (see, for example, USAID et al., 2002; and AfDB, 2007a).

Figure 5.1 illustrates the causal relationship between oil and gas resources, governance, and wealth creation. In other words, there is a great opportunity to transform oil and gas resources into wealth, poverty alleviation, human capital, institutional development, and so on, provided that basic good governance principles such as strengthened institutions, transparency, accountability, and enhanced civil society are pursued. Once economic growth and other positive results are achieved, there is a potential positive feedback loop created by turning the

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growth into investments and enhanced resource management and utilization. All these opportunities can be achieved and properly harnessed *only* if the good governance component is in place.

Implementing a nature–wealth–governance framework for development in Africa requires new strategies and instruments. Africa’s future economic growth and development cannot be separated from the management of its natural resources, and sound environmental management cannot be separated from the broader context of politics, political systems, and governance (AfDB, 2007a).

The nature, wealth, and governance principles outlined above are consistent with the features, components, and instruments of other recently developed analytical frameworks for utilizing natural endowments to foster sustainable development (AfDB, 2007a). These include the frameworks developed from the analysis of minerals and mining by the World Bank, the United Nations Conference on Trade and Development, and the International Council on Mining and Metals (World Bank, UNCTD and ICMM, 2006) and by the Mining, Minerals and Sustainable Development project (MMSD, 2002). They are also similar to the features of new poverty reduction frameworks developed by the United Kingdom’s Department for International Development (DFID, 2006a; 2006b; 2002; Pearce, 2005; UNEP and IISD, 2004).

Table 5.1 illustrates the complex challenges and opportunities that arise in the implementation of the suggested

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model. The main challenges, opportunities, and policy issues are listed according to interlinked main elements: oil and gas resources, governance, and wealth (corresponding to the model in Figure 5.1). The main challenges related directly to oil and gas resources include issues such as geographic distribution of oil and gas resources, the particular economic nature of the oil and gas, environmental problems, limited knowledge of the resource, lack of appropriate human capital, and inadequate contracting procedures. At the “governance level” the main challenges include weak legal and fiscal regimes, corruption, social and political conflicts, inappropriate revenue distribution mechanisms, lack of human capital, weak institutional capacity, and lack of resources to improve governance. The challenges related to the wealth include inability to attract investment into the oil and gas sector (especially the downstream industry), deficiencies in promoting economies of scale, limited cost-effective technical solutions, lack of equitable distribution of wealth, macroeconomic distortions, dependence on a few commodities (lack of diversification), price volatility (makes planning difficult), limited intra-regional trade and cooperation, and so on. This matrix of challenges can be streamlined further by distinguishing between the specific issues related to net oil-importing countries and oil- and gas-producing countries (discussed in more detail in Section 5.3).

Table 5.1 also presents potential opportunities in terms of oil and gas resources, governance, and wealth

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**Table 5.1: Main Challenges and Opportunities in Turning Oil and Gas Resources into Economic Growth and Policy Implications**

| Issues     | Oil and Gas Resources   | Governance  | Wealth and Poverty Reduction   |
|------------|---|---|--|
| Challenges | <ul style="list-style-type: none"> <li>• Erratic distribution of resources</li> <li>• Enclave nature of O&amp;G resources</li> <li>• Environmental pollution (e.g. gas flaring)</li> <li>• Limited geological data and knowledge (resource estimate, evaluation)</li> <li>• Lack of skilled labor/expertise</li> <li>• Procedures for contract preparation, negotiation are not optimal</li> <li>• Refinery inefficiency</li> </ul> | <ul style="list-style-type: none"> <li>• Corruption</li> <li>• Social and political conflicts</li> <li>• Equitable growth and revenue distribution</li> <li>• Build capacity and invest in human resources and productive capital</li> <li>• Human and institutional capacity</li> <li>• Weak legal and fiscal regimes</li> </ul> | <ul style="list-style-type: none"> <li>• Attracting investments to the oil and gas sector</li> <li>• Promoting economies of scale</li> <li>• Limited cost-effective technology</li> <li>• Inequitable distribution of wealth, limited effect on poverty reduction</li> <li>• "Dutch disease" and macroeconomic distortions</li> <li>• Dependency on a single commodity (lack of diversification)</li> <li>• Price volatility</li> <li>• High oil prices for <i>net oil-importing Africa</i></li> <li>• Low regional trade integration and cooperation</li> </ul> |

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|--|---|--|----------------|
| <p>Opportunities</p> <ul style="list-style-type: none"> <li>• Significant resources (more to be found)</li> <li>• Increased attention on exploration</li> <li>• Oil and gas of high quality</li> <li>• Learning from other countries, in Africa and elsewhere</li> </ul> | <ul style="list-style-type: none"> <li>• Transparency initiatives (EITI, APRM, PWYP, etc.)</li> <li>• Continued democratic development</li> <li>• NGOs, civil society engagement</li> <li>• Awareness, rights issues, etc.</li> </ul> | <ul style="list-style-type: none"> <li>• Africa is strategically located to meet the demand</li> <li>• Improved royalty, revenue, and tax regimes</li> <li>• Investment in economic diversification</li> <li>• Investment in human and productive capital</li> <li>• Link to social and physical development</li> <li>• Savings and stabilization (investment and future funds, etc.)</li> <li>• Use resources (income) for PRSPs, etc.</li> <li>• Promote rural development</li> <li>• Increased worldwide demand (including Africa)</li> </ul> | <p>(cont.)</p> |
|--|---|--|----------------|

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**Table 5.1: (Continued)**

| Issues             | Oil and Gas Resources   | Governance  | Wealth and Poverty Reduction   |
|--------------------|---|---|--|
| Main Policy Issues | <ul style="list-style-type: none"> <li>• Support geological surveys</li> <li>• Support research, innovation, and dissemination of improved technology</li> <li>• Support improved knowledge and contract procedure, etc.</li> </ul> | <ul style="list-style-type: none"> <li>• Support and strengthen transparency and accountability initiatives</li> <li>• Enhance decision-making and “local content” development</li> <li>• Regulation, legislation, information</li> <li>• Increase awareness (institutions, civil society, population)</li> </ul> | <ul style="list-style-type: none"> <li>• African Petroleum Fund (and other initiatives to address high oil prices)</li> <li>• Promote regional integration (trade, infrastructure, coordination, expertise)</li> <li>• Resource allocations and funding of investments, projects, improved procedures, etc.</li> <li>• Support learning processes, innovation, experimentation, diversification (workshops, training, centers of excellence, etc.)</li> <li>• Increase energy access, efficiency—and engage in alternative energy supplies (to fossil fuels) as a medium–long-term solution</li> </ul> |

Source: Authors.

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creation. Section 5.4 explores some of these opportunities in more detail. Finally, Table 5.1 also highlights some of the main policy issues, including those that are highly relevant for regional institutions such as the African Development Bank and the African Union. These will be discussed further in Chapter 6.

### 5.3 Challenges

#### 5.3.1 *Net Oil-Importing Countries in Africa*

One of the characteristics of oil and gas is high price volatility. High oil and gas prices have a dramatic impact on net oil-importing countries (NOICs) in Africa. High commodity prices have already been a motive for riots and demonstrations in many African countries (for example, in Mozambique on February 5, 2008). The main reason for the public outcry is the more than 50 percent rise in public transport costs as a consequence of the increase in the pump prices for diesel and petrol. The rise in the pump price of fuel results in an increase in the general cost of living. The scenario is even worse for poor households that depend on kerosene for lighting and cooking.

Coping with high oil prices, worsened by lack of resources to establish stabilization mechanisms and price smoothing, is one of the major challenges facing NOICs (Chapter 4). Most countries have opted to either partially or completely pass through the international oil prices,

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while others have introduced subsidies. All these mechanisms have proved inefficient in coping with high oil prices in Africa.

### 5.3.2 *Net Oil-Exporting Countries in Africa*

**Managing oil wealth:** Oil and gas exploitation have caused major economic, social, political, and environmental problems in some net oil-exporting countries. Oil wealth has not supported sustained economic growth and development in most countries. The major challenge is to translate oil wealth into sustained economic growth and development.

Particular challenges faced by oil-rich countries include weak governance, low accountability, low capacity for proper budgeting and accounting, and lack of transparency in the oil and gas industry. These lead to high investment uncertainty, and, in some cases, may fuel social conflicts. The Extractive Industries Transparency Initiative (EITI) offers an opportunity to address the issue of transparency.

Equitable allocation of the proceeds from oil is key to reducing the risk of social tensions in oil-rich countries. In Nigeria, for example, the federal government passes 13 percent of oil revenues to the nine oil-producing states, primarily to reduce conflict and promote local development. Although this may not fully satisfy the local stakeholders in the Niger Delta, it is a step in the right direction (see Box 5.1).

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### Box 5.1: MANAGING OIL WEALTH IN NIGERIA: THE CHALLENGE IN THE NIGER DELTA

The struggle for the control of oil wealth dates back to the 1960s. At stake has been the quintessential property rights issue: who owns the oil resources in the Niger Delta? Through legislative enactments, most notably the Land Use Decree of 1978, the federal government has vested the ownership of all land in the country to itself, including the minerals, ores, oil and gas resources found in them. This has been contested by local communities. There are three inter-related dimensions to the Niger Delta crisis: economic (resource control); environmental (the negative impact of oil exploitation on the environment); and social (health and human rights issues).

In recent years, several factors have contributed to the intensification of the conflict over the control of resources: the communities' increased sense of deprivation, the growing ecological damage, the lack of physical and social infrastructural facilities, and the deepening poverty and neglect in the region.

A solution to these problems must include community involvement in developing programs for the region, community empowerment, and restoration of trust between the communities, the oil companies, and the government. In practice, this calls for several initiatives: new or renewed efforts in hiring indigenes into operational, managerial, and executive positions in the oil and gas sector, within the government, and in the oil companies; award of maintenance and servicing contracts to indigenes; allocation of oil blocs to the communities; involving the communities in the design and implementation of programs for the region; and empowering the communities by providing them with financial resources for developing their own businesses and for skills development, so that they are active participants in the execution of the various programs being planned for the region.

In addition, equity could be promoted through the creation of decentralized trust funds for specific programs that address the key issues in the Niger Delta. These can include a physical infrastructure fund, a social infrastructure and training trust, an environmental repair trust, and a small-medium enterprise fund. The trust funds would be managed by corporate governance structures that include federal (state government) and community representatives. The arrangement will also enhance government–community partnerships, stimulate competition among the various funds to produce results, and generate jobs, especially for youths.

*Source:* Otobo (2007) and AfDB (2007a).

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**Economic distortion:** The risk of the Dutch disease constitutes an important management challenge for oil-producing countries. Non-inflationary policies to prevent hyperinflation and maintain monetary credibility can minimize the risk of the Dutch disease. Moreover, it is important to promote non-oil industries or strengthen linkages that can be leveraged by the revenue from oil as a way to reduce dependence on a single commodity.

**Environmental challenges:** A large amount of the associated gas has been flared over the years at enormous economic and environmental costs locally and globally. Utilizing Africa's gas resources to benefit the region will be a major challenge in the quest to achieve expanded energy access in the region (AU, 2006). Currently, the use of gas is minuscule compared with its potential industrial and power use and LNG export should help eliminate all flared gas in the region.

**Lack of institutional, technical, and human capacity:** Traditional and new oil-producing countries usually lack adequate infrastructures to manage the oil and gas sector; in addition, the lack of technical and human capacity undermines the ability to maximize the gains from oil resources.

### 5.3.3 Regional Integration

A key economic challenge in Africa is securing reliable energy security and access for both consumption

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and industrial use. African countries *are* prioritizing expanded energy access. Dependence on small domestic markets in seeking to achieve this expanded energy access may not be economically viable and may thus not be the right path to pursue. Broadening national boundaries into expanded regional energy markets, driven by regionally based efficient energy production and supply structures, is central to securing affordable, reliable, and efficient energy supply. This objective is a major economic and political challenge that will face the continent in the next decades.

#### 5.3.4 *Information as a Challenge*

Access to information is also a key challenge to sustainable use of oil and gas resources in Africa. Most African countries lack data on demand and supply by end use, price, cost, inventory movement, investment, and trade flows, on a timely and consistent basis. Effective policy design and analysis require that information should not only be available, but be reasonably accurate and distributed in a timely manner. Lack of information (mainly geological and market data) leads to weak bargaining power in contract and concession negotiations, resulting in suboptimal capture of rents from oil resources. Thus, national strategies for natural resource extraction must involve plans and funding for capacity development and generation of reliable and timely information.

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### 5.3.5 *Inadequate Policy and Legal Framework*

In some African countries, oil and gas management is governed by rules, regulations, and other command-and-control mechanisms that stipulate what people can do and what they cannot do. The legal systems, which are either concessionary or contractual, have been developed mostly to address the rights and obligations of host governments and of private investors (Tordo, 2007). Regulations place conditions and requirements on the use of oil and gas resources, and establish sanctions—fines, fees, and other charges—for non-compliance. However, the enforcement of these rules, regulations, and mechanisms has been insufficient and ineffective. Many countries lack or have inadequate policies and legal frameworks for managing oil and gas resources. Other countries have unstable policy frameworks. Quite often, laws do not meet the requirements of international organizations in terms of transparency, accountability, and other good governance criteria. Also, lack of modern oil and gas exploitation policies is a severe drawback to the development of the sector. These include policies guiding contracts, documentation of exploitation, code of conduct and exploitation practice, training and development of local staff and community members, oil and gas research, financial guidelines, and environmental regulations. In some countries, the oil and gas sector has been driven by annual ministerial policy statements on the budget. Yet the importance of the sector in the African economy requires that a long-term planning approach

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for oil and gas development be adopted. Indeed, the absence of modern laws, standards, and codes governing oil and gas investment and management, and the lack of effective legal and regulatory enforcement mechanisms for such laws, standards, and codes, negatively impact the social, financial, and economic sectors. Potentially adverse effects are on the environment (pollution); accountability and revenue collection (evasion of taxes, duties, royalties, unjust enrichment, and corruption); trade (smuggling of conflict minerals, unauthorized exports of internationally sensitive materials); populations (displacements, lack of benefits for communities from resources); exports (slow and improper issuance of export permits); and revenue generation (suboptimal socioeconomic and financial returns from extractive resources).

Policies and legislation regulating the sector must be imperatively reviewed. Oil and gas policy objectives in African countries have to be formulated in the context of the following settings: the existing economic, social, and environmental policies; the nature and linkages of the oil and gas sector with other sectors; and international and regional linkages of the sector. Oil and gas policy should seek to meet the following broad objectives: establish the availability, potential, and demand of oil and gas in the countries; increase access to modern, affordable, and reliable oil and gas services as a contribution to poverty eradication; improve oil and gas governance and administration; stimulate economic development; and

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effectively and efficiently manage oil- and gas-related environmental impacts.

Fundamental to attracting meaningful investments and developing beneficial relationships for all stakeholders is the need to have sound legal and regulatory frameworks in which oil and gas projects are designed, negotiated, implemented, and managed. This entails having appropriate and reasonable investment guidelines, taxation regimes, environmental guidelines, labor laws, and enforcement mechanisms. In addition, in order to attract investment to the oil and gas sector, laws, regulations, and policies governing the industry should be clear, complete, transparent, accessible, flexible, and practical. Legal processes must be quick and remedies efficient and effective. Stability of fiscal contract terms is also essential. Also, a consultative process should be institutionalized to ensure periodic dialog with operators to ensure that regulations are technically feasible and cost-effective.

### 5.4 Opportunities

The increasing competition for African gas—due to rising international trade, the environmental advantages of gas over oil, and production declines in the largest gas markets in OECD countries—represents an opportunity for Africa. Thus, appropriate strategies must be designed for development and expanded regional use of this premium energy resource.

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Africa has a unique opportunity to learn from the experiences of other countries and continents to get it right in terms of sustainable management of its oil and gas resources.

It is important to encourage the voice of civil society in monitoring and overseeing the management of oil and gas resources with the main objective of guaranteeing equitable distribution of revenues. The international transparency initiatives (EITI, APRM, and others) that promote wider involvement of the public in oil and gas management can also help promote sustainable use of the resources. Furthermore, the continuous democratization of the continent is a key opportunity for the sustainable management of oil and gas resources.

### 5.5 Summary and Conclusion

Oil and gas resources can be a source of growth and development if efficiently exploited and managed. To promote broad-based development and socioeconomic equity, governments must ensure that all citizens have equitable opportunities to access and use natural resources. Governments can promote pro-poor economic growth by helping to create new opportunities that boost the assets of rural communities, especially those engaged directly or indirectly in oil and gas exploration.

Experience shows that institutional and governance failures are the root causes of much underdevelopment

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and environmental degradation in Africa. The absence of responsive governance threatens natural resource management, economic growth, and the well-being of the population at large (AfDB, 2007a).

To maximize the gains from oil and gas resources, countries must pursue a number of strategies, including the following:

- Deepening current economic, social, and political reforms at the country, sub-regional, and regional levels;
- Promoting increased domestic value-added to oil and gas in Africa through expansion of downstream activities to meet both regional and export demand;
- Deepening integration efforts to create dynamic inter- and intra-regional markets for goods, including energy. This must address the issue of competitiveness, for example;
- Ensuring transparency in oil and gas exploitation and resource wealth management;
- Strengthening the fiscal and legal framework for oil and gas market operations and regulation;
- Defining roles for key stakeholders in the region, including the African Union, the AUC, UNDP, AfDB, and other development institutions, such as the World Bank, the OPEC Fund, and the EU;
- Raising awareness about the moral hazard problem associated with providing financial resources for countries affected by higher oil and gas prices. Such resources have the potential to reduce the incentives

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of beneficiaries from taking the required policy measures for the emergence of a more efficient domestic energy market that helps reduce vulnerability to external oil market shocks;

- Making a long-term and credible regional and sub-regional commitment to a sustainable energy vision anchored on the emergence of efficient oil and gas markets in the next few decades; and
- Adopting regional and sub-regional strategies for developing energy security.