

CHAPTER 6

The Way Forward

Introduction

Natural resource endowment is a source of wealth and can be expected, if well managed, to support growth and development. This involves transforming the wealth into physical and human capital, increasing and sustaining economic growth, and alleviating poverty. Thus, the theoretical expectation is that resource-based economies are better placed to achieve economic transformation through a ‘big push’ from natural resource wealth. This expectation conforms with the long-held view of development economists that poor countries need a “big push” to propel them to economic take-off. However, with a few exceptions, the performance of resource-rich African countries has been relatively poor, in terms of economic growth and poverty reduction, and is much less than expected considering the vast amounts of resources extracted and exported. This situation poses a puzzle that some development scholars describe as the paradox of plenty, or the resource curse.

The debate on natural resources and economic growth has changed significantly over the past 40 years. The focus of natural resource-rich countries four decades ago was the potential negative impact of deteriorating terms of trade on primary agricultural products. During the next three decades, this focal point gradually shifted to the impact of resource windfalls — particularly those from oil, gas, and minerals — on fiscal management and growth and,

ultimately, to prospects for economic development. Today, the discourse has broadened even further to understanding the critical linkages between resource-endowments, fragile states, weak institutional capacity, poor governance, and civil conflicts. Moreover, recent increases in commodity prices have been accompanied by growing concerns about the impact of resource booms on African countries. Indeed, the prices of a wide range of commodities — including agricultural products, oils and minerals — have risen sharply in the last five years, driven by strong global economic growth and rising demand. Oil prices, for example, reached a historic nominal high of USD 78 as recently as August 2007.

From these trends, it is clear that the diversity of African countries in their resource endowment presents both winners and losers of high commodity prices in net terms. However, it is even more important to understand how winners and losers emerge from natural resource bonanzas. In other words, how do some countries succeed in harnessing natural resource-wealth to boost economic growth while others become trapped in the resource-curse syndrome or the paradox of plenty?

Evidence from successful resource-rich countries indicate that the successful pathway to harnessing natural resource wealth for economic growth is nested in good institutions, trade openness and high investments in exploration technology and

human capital development. Sound natural resource management for economic growth therefore requires investment of resource rents in reproducible assets directly related to physical and human capital. To this end, Botswana serves as a classical example in Africa, while other countries such as Canada, Australia and Norway provide further evidence (in a global context) that it is indeed possible to escape the resource curse.

In most cases however, natural resource endowment has led to more or less severe versions of the resource curse (as outlined in Chapter 4). This is evident in the developing world, especially in Africa. Consequently, the search for practical solutions that will improve the management of Africa's natural resources for the good of the continent has become an imperative. This Chapter addresses the key issues that have emerged from the preceding chapters and highlights critical elements for the way forward, which involves turning Africa's resource curse into a blessing. The continent's natural resource endowments have a significant potential to stimulate growth and generate multiplier effects on a massive scale, but management bottlenecks have to be addressed. This hinges on:

- ensuring Africa's ownership of the development process;
- strengthening initiatives to monitor resource revenues;
- achieving a higher level of transparency;
- enhancing governance systems;
- reinforcing institutional capacity;
- investing natural resources wealth in the creation of knowledge for eco-

nomie innovation;

- negotiating better terms with external partners; and
- integrating the natural resources sector into national development frameworks.

Given the finite nature of non-renewable natural resources, it is imperative that the wealth they generate be invested in other forms of capital, particularly human capital, social services, and physical capital.

Natural Resources as Endogenous Sources of Growth

Natural resources are a major source of wealth and power in Africa and, as outlined in the Report they are fundamental for growth and development. Indeed, the quest for Africa's economic development has focused on natural resources precisely because of the central role they play in guiding the development trajectory and in enhancing the efficient accumulation of physical capital (including infrastructure) and human capital in developing economies. However, the management challenges they pose cannot be overemphasized. In addition, the context is broader than just natural resource management. Resource control, governance, transparency in the utilization of resource wealth for development, and sustainability of the resource base are critical ingredients that should be embedded in any coherent strategy for harnessing natural resource wealth for economic growth.

Abundant natural resources can be advantageous to economic development as they provide a platform for three critical

elements of economic growth: (1) competitive diversification away from dependence on agricultural primary products; (2) investments in human capital development; and (3) infrastructure development. All may be critical prerequisites for investment in productive activities. The United States of America, Australia, Canada, Botswana, and Malaysia provide good examples of successful resource-based development (see case examples below). Based on these examples, there is optimism that African countries can indeed use natural resource wealth to achieve economic growth, provided they draw on the fundamental lessons that have enabled other countries to do so.

Competitive Diversification: With respect to diversification, what matters most for resource-based development is not the inherent character of the resources, but the nature of the learning process through which their

economic potential is achieved. To begin with, resource-rich African countries can pursue a virtuous cycle of competitive diversification and industrialization. As indicated in Box 6.1 (the case of the United States of America), the linkages and complementarities of other economic sectors to the natural resource sector are vital to economic transformation in resource-abundant countries. In particular, African governments must pursue the diversification goal when designing strategies to best exploit their natural resources. These should range from maximizing the value of locally retained earnings and the creation of forward and backward linkages to the economy (to avoid enclave economies) to technology transfer, job creation, and minimization of environmental damage and social impact.

African countries should systematically exploit opportunities and linkages leading to

Box 6.1: Resource Wealth and Growth: The Case of the USA

Resource abundance is a distinguishing feature of the rise of the American economy. However, while the American economy may have been founded on resource abundance, Americans have not been rentiers living passively off their mineral royalties. The American economy has clearly made good use of its abundant resources. In the industrialization and growth of the American economy, nearly all major US manufactured goods were closely linked to the resource economy in one way or another: petroleum products, meat packing, poultry, steel works and rolling mills, coal mining, vegetable oils, grain mill products, sawmill products, and so on. The only items not conspicuously resource-oriented were various categories of machinery. Even here, however, some types of machinery serviced the resource economy (such as farm equipment), and virtually all machines were made of metal.

These observations by no means diminish the country's industrial achievements, but they confirm that American industrialization was built on natural resources. Furthermore, the abundance of American mineral resources should not be seen as merely a fortunate natural endowment. Their use demonstrates a form of collective learning, a return on large-scale investment in exploration, transportation, geological knowledge, and the technologies of mineral extraction, refining, and utilization.

Source: Wright (1990), *The origins of American Industrial Success 1870–1940*

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competitive diversification to ensure that they grow resource economies that can service emerging industries for added downstream value and side stream supply of inputs (and emulate resource-rich Asian countries in Asia such as Malaysia; see Box 6.2).

Economic diversification, in particular the emergence of a comprehensive manufacturing sector, creates positive externalities. The manufacturing sector enhances the search for competitive advantage, which is based on the search for the development of technology, as well as for innovation benefits that come from “learning by doing processes”. Unlike primary production, manufacturing is associated with the development of human capital, which, in turn, benefits the entire economy. This relationship is perhaps most

clearly demonstrated in some *resource-deficient* countries that devote their resources to the production and export of manufactured goods, which is associated with the development of high levels of skill, technology, and innovation.

Human Capital Development is another crucial mechanism for transforming natural resource wealth into economic growth. Human capital is an aggregate of the skills and knowledge of the workforce, with direct linkages to labor productivity — which can be a direct cause of economic growth. This implies that an economy that invests in human capital development, primarily through education and other forms of training that hone the skills of the workforce, is preparing itself for economic growth through

Box 6.2: Malaysia — Resource Wealth and Competitive Diversification

Malaysia’s use of natural resources to attain economic growth through diversification is often cited as nothing less than fascinating. The Malaysian model is particularly interesting since the country adopted very restrictive trade policies in the late 1960s in order to enhance the development of its import-substituting industries. This policy was later changed in the 1980’s when the country prioritized macroeconomic stability and a relatively open trade policy. Although the macroeconomic policy, centered on the Big Push, created some economic imbalances and was probably overambitious, the country was able to quickly offset the commodity price shocks of the late 1980s through rapid diversification and expansion of export-oriented manufacturing.

This strategy was nested in a political compromise that allowed the Malay majority to focus on political processes while the Chinese minority focused on business expansion opportunities. Thus, the success of the Malaysian resource-based economic transformation is also rooted in ethnic cordiality and mutual tolerance.

The Malaysian experience clearly shows how macroeconomic and fiscal discipline, coupled with high social capital (harmony among ethnic groups), can allow a resource-rich country to transform resource wealth into sustainable growth. Although there were some policy distortions in the Malaysian case, the general conclusion that resource-rich countries can achieve competitive diversification through a strong focus on sound economic policies that maintain market discipline remains valid.

Source: Auty (1998), Resource Abundance and Economic Development

improved efficiency and increased returns on investments. Thus, investment in the development of the education sector, which generates human capital, plays an integral role in economic growth. In spite of these clear linkages between human capital development and economic growth, resource-rich countries seldom invest in human capital development, at least not proportionately. There are two main reasons for this.

First, the returns on investment in human capital development accrue only over the long-term, and often do not appear attractive to resource-rich countries intent on hurriedly reaping resource benefits and spending the windfalls. Second, primary production and natural-resource-based industries (extractive industries) do not require high levels of human capital — in comparison with the manufacturing sector. Given that human capital represents one of the most important components of income creation, economies based on low human capital-demanding sectors will be characterized by low levels of economic growth. In general, it has been observed that multinational companies, to a large extent, bring their own expertise and skilled labor instead of training local people to acquire the needed skills. This leaves the local economies of resource-rich countries with little or no human capital development resulting from the activities of foreign firms.

Furthermore, in most resource-rich African countries, wealth from large natural resource endowments are managed in ways that create distortions in the economy. Primary production is often supported, as it appears particularly attractive and especially as it requires lower levels of initial

investment. However, the wealth generated from these primary industries can only be sustained in the long-term if it is transformed into human, physical (including infrastructure), and social capital. These will then facilitate investments and the emergence of a vibrant private sector that will foster economic diversification and reduce resource-dependence, hence minimizing the effects of commodity shocks on the macro economy.

In some cases, resource-rich countries provide education, funded largely from resource windfalls, to appease their populations and constituencies. However, without targeting the investment to the types of skills that are relevant for economic diversification, the education qualifies as a consumption good, rather than a true creation of capital goods in the form of long-term productive human capital. In contrast, a resource-rich country that systematically plans its economy on a long-term basis and is ready to diversify and prioritize human capital development can achieve long-term growth-enhancing benefits. A case in point is Botswana, which has used its natural resource wealth to achieve economic growth through good policies, prioritized investment in human capital, infrastructure, and economic diversification (Box 6.3; also refer to Box on diamond mining in Botswana in Chapter 3).

Investing natural resource wealth in human capital development can also be considered critical from the perspective of the MDGs. Developing human capital by achieving universal primary education is a critical pillar of MDG 2. By 2005, the net enrollment rate for primary education in

Box 6.3: Botswana — Turning Natural Resources into Human Capital

Diamonds were first discovered in Botswana in 1967. Since then, the country has experienced strong economic growth, which it has sustained. Over the decades, the country has moved from being one of the poorest economies in Africa to being a model for Africa and one of the continent's rare success stories.

Since its independence, Botswana has implemented successive national development plans (NDPS), which of late have focused on the country's long-term vision of "towards prosperity for all", commonly referred to as "Vision 2016". The Vision comprises four pillars. Two of the pillars ("a prosperous, productive and innovative nation", and "an educated and informed nation"), focus on the efficient use of natural resources for human capital development. The national plans take into account all sectors of the economy and ensure efficient and effective utilization of all resources in accordance with national priorities. Human capital development is one of the country's key priorities — with great emphasis on education, health and infrastructure development — as well as the creation of a stable macroeconomic environment. In revenue allocation, Botswana has thus endeavored to achieve optimal balance between consumption and development.

The mid-term review of the current ninth National Development Plan (NDP 9) places emphasis on high budget allocation to development priorities rather than to recurrent expenditures. This should help achieve an investment level of between 30 percent and 40 percent of the GDP over the Vision 2016 period. Botswana's real GDP growth rate averaged 9.8 percent between 1966 and 2004, largely on account of the discovery of minerals and prudent management of resource revenues, which were supplemented by donor financing in the early days. Mineral resources have enabled the country to build schools, colleges and hospitals, and other requisite infrastructure. For example, there were only nine government-owned secondary schools in 1966; by 2007, this number had increased to 233. The country also plans to increase student participation in senior secondary school from 62 percent in 2007 to 100 percent in 2015.

The country has also fared well in the social sector: in 2001, a total of 97.7 percent of the population had access to safe drinking water and 77 percent to adequate sanitation. Life expectancy, however, dropped from 66 years in 1966 to 56 years in 2001, owing to the HIV/AIDS epidemic. Poverty rates, measured by the number of people living below the poverty line, declined from 47 percent in the 1993/1994 financial year to 30 percent in 2003/2004. Poverty rates are projected to fall to 23 percent in 2009.

All these achievements have placed Botswana among the highest achievers in the continent, in terms of both economic growth and of progress towards the MDGs. This achievement has not been easy, but it was made possible with careful planning, targeted and prioritized investment of resource revenues, and sound fiscal planning and management.

Source: Baledzi Gaolathe (2007)

Sub-Saharan Africa was still only 70 percent (95 percent in Northern Africa)¹. There is thus clear room for investment in human capital development in the continent.

¹ UIS (UNESCO) (2007)

Infrastructure Development: In addition to developing human capital, transforming natural resources into productive capital also involves the development of infrastructure such as roads, power supply, water supply, and sanitation and communication facilities. These are critical for improving the

investment atmosphere and stimulating economic growth. In other words, achieving sustained growth from natural resources entails managing a complex portfolio of natural, human, and social capital. All of this hinges on infrastructure as a prerequisite for economic transformation — for instance, by enhancing the openness of the economy and facilitating the exploitation of trade, communications, and the movement of people.

The linkages between infrastructure and natural resources are thus multi-dimensional and comprise economic, social, and environmental perspectives. Infrastructure is needed to exploit natural resources and transform them into income and wealth. Infrastructure provides the complex of physical structures and networks within which social and economic activities are carried out, and thus serves as an essential public good. It is often a prerequisite for economic diversification, growth, and equitable development. Providing a base for economic diversification, infrastructure enhances forward linkages in the economy that provide value addition to natural resources, hence increasing wealth and supporting sectoral linkages through job creation and enhanced trade. This facilitates the full realization of the non-commodity sectors that are critical for economic diversification. As indicated in Figure 6.1, downstream value-addition, beneficiation, and export of resource-based articles can contribute significantly to job creation and diversification of income sources. Technological linkages also incorporate innovation and adaptation with other sectors that are critical for the economy and for reducing shocks associated with volatile commodity prices.

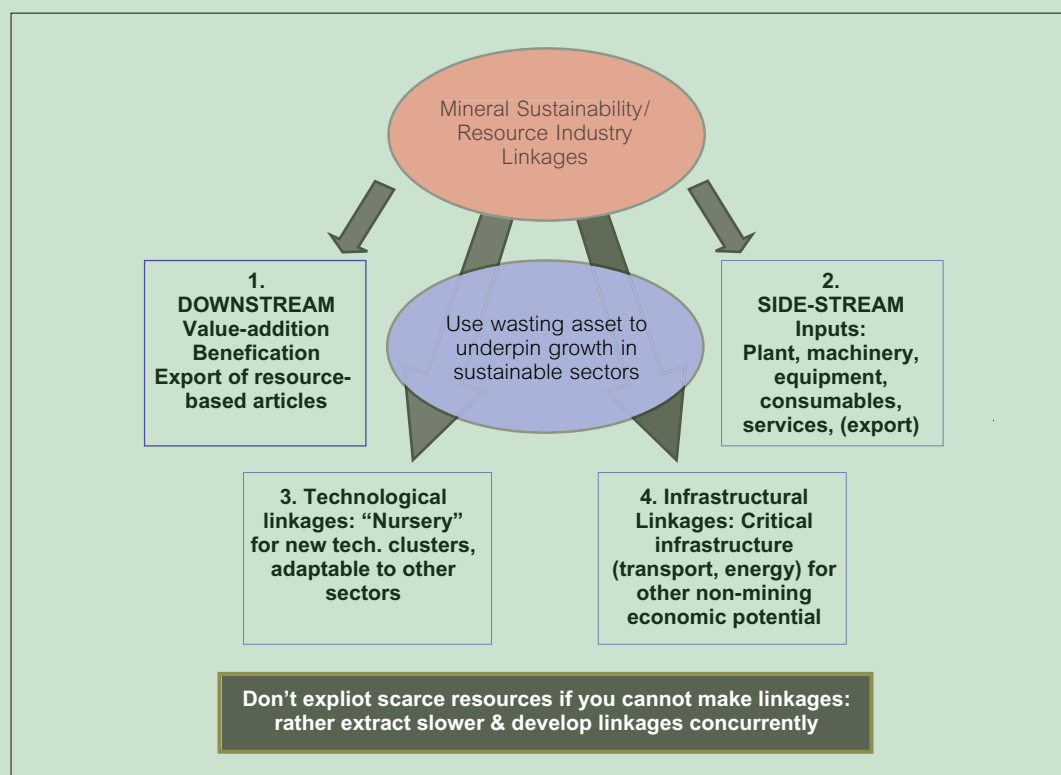
Good Governance and Management of Natural Resource Revenues

There is growing consensus on the centrality of good governance for Africa's development. African leaders, regional institutions, and all key stakeholders have stated unequivocally that good governance is a key prerequisite for development. One of the key objectives of the African Union is to promote democratic principles and institutions, popular participation and good governance. Furthermore, the African Union's New Partnership for African Development (NEPAD) identifies good governance as a basic requirement for peace, security, and sustainable growth and development. One of the desired outcomes of NEPAD is for Africa to adopt and implement principles of democracy and good political, economic, and corporate governance, and the protection of human rights. Although governance improvements face difficult challenges in Africa, it is encouraging that key institutions in Africa — and Africans themselves — are demanding better governance for the continent.

Developed countries are also committed to supporting good governance in Africa, as demonstrated by the G-8 Summits, the recent G-8 Finance Ministers Meeting in Potsdam (*Action Plan for Good Financial Governance in Africa*), as well as the Paris Declaration on Aid Effectiveness. Moreover, citizens of developed countries have expressed strong support for good governance in Africa, manifested by the continued mobilization of civil society organizations and advocacy groups.

Accountability and transparency in the management of public resources is critical in

Figure 6.1: Key Linkages — Extractive Industry, Natural Resources, and Development



Source: Jourdan (2007)

determining the allocation and use of resources and in ensuring development impact and fiduciary risks, perhaps nowhere more so than when significant natural resource wealth is present. As outlined in this Report, the abundance of natural resources is not in itself the cause of underdevelopment or of conflicts in African countries. There are often clear linkages, but the primary causes are fragile institutions, poor policy choices and government

practices, and inappropriate approaches to governance of natural resources and to utilization and investment of the wealth created.

Natural Resources and Strengthening of Institutions and States

It is commonly accepted that the "first-best strategy" for enhancing natural resource management and revenue transparency is to strengthen institutions as well as the

legislative system and to insist on accountability and resource revenue transparency. Another approach is to put natural resource revenues in special funds to ensure that the interests of future generations are safeguarded. However, in countries with weak institutions, such a fund may very well be raided. An interesting alternative is to change the constitution to guarantee that resource revenues are provided directly to the public one way or the other — implying that the government has the burden of proof that resource revenues are being extended to the people. Nevertheless, whether or not such special approaches are pursued, improving governance and strengthening institutions is fundamental, and should be the first-best option.

A key recommendation is to promote the core elements of a *developmental* rather than a predatory state as a way of minimizing the risk of suffering from the “curse”. Developmental states need the institutional capacity to implement the necessary policies without being controlled or captured by narrow private interests. Thus, the legitimacy of a government derives from its ability to deliver development, defined simply as an improved standard of living for the majority.

Management of Natural Resource Revenues

The objective of maximizing natural resource revenues and benefits for current and future generations can be broken down into four key issues, which correspond to different stages, from extraction through revenue flows to expenditure. The first issue concerns contracts with exploration

companies and appropriate fiscal regimes; the second, the importance of transparency in natural resource payments and spending of the resulting revenues (including suggestions for more effective public sector financial management); the third deals with the timing of natural resource expenditures, in particular, how this can benefit future generations; and the fourth focuses on the core discussion about consumption and investment.

Contracting and fiscal regimes: The interaction between natural resource licensing, contracting, and taxation regimes is complex. These regimes or measures have to attain the dual objectives of achieving efficiency for the full scale of operations and securing revenue transfer to the host country. This requires sound principles to guide the design of efficient contracts and the auction and allocation of mineral and energy rights.

Achieving efficiency in the full scale of operations imposes a number of requirements. Firms should have incentives to participate, to extract efficient quantities, and to invest in exploration, extraction, production, marketing and sale. This, in turn, requires, amongst other things, that contracts be time consistent and sufficiently elaborate so that governments do not have an incentive or a need to renege and, in extreme cases, even threaten with expropriation.

Efficiency thus applies not only to the stream of output, but also to aspects such as the efficient distribution of risk — both production risk and price risk — among parties to the contract. This depends on the ability of firms and governments to bear risk

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and to trade risk on international capital markets. The contract may also specify environmental conditions as well as the transfer of knowledge and other tangible or intangible assets.

How can these objectives be met? An auction is an attractive option in a simple environment, since competition between

firms will secure both efficiency — maximization of net revenues — and maximum net transfers to the government (see Box 6.4). Auctions also have the great merit of ensuring transparency, if conducted appropriately. However, things may become more complicated with multidimensional contracts; for example, if bidding is on a single variable,

Box 6.4: Auctions for Mineral Rights

African governments have been selling mineral extraction rights for decades, but the terms of these deals have often been unsatisfactory. Mineral extraction companies inevitably have better access to information on their specific business than African governments do. This information gap is sometimes compounded by an “agency” problem, which may occur when a deal is struck between the representative of a company and the representative of a country. Companies are in a better position to ensure that their representatives are acting in the interests of the company, whereas it is difficult for governments to ensure that their representatives are acting in the interests of the country. The information gap and the agency problem combine to reduce the benefits that countries derive from their resources. For example, in 2006 the government of the Democratic Republic of Congo received only USD 86,000 in royalty payments despite mineral exports in the order of USD 200 million. How can these problems be solved?

An auction of extraction rights is the institutional practice that generally maximizes government revenues from minerals. The huge advantage of an auction, compared with other ways of selling rights, is that it uses competition between companies to reveal the true value of the rights. This redresses the informational disadvantage of the government. The British government’s use of an auction to sell the rights to its mobile telephone network demonstrates the superiority of an auction over attempts by civil servants to estimate the value of rights. The British Treasury, one of the most sophisticated centres of public sector financial expertise in the world, was about to sell the rights to a company for £2 billion when it was persuaded to switch to an auction. The rights were sold through the auction for £20 billion. If the British Treasury can misestimate the value of rights by a factor of ten, it is safe to assume that African civil servants are also liable to make large pricing errors. Not only does an auction bridge the information gap, it can also address the agency problem. A well-conducted auction vastly reduces the scope for government officials to put private gain before national interests.

A successful auction must follow standard procedures. In this regard, support, in the form of expertise and verification, should be provided to the official responsible for the auction. Experts provide advice on the precise design of the auction: for example, it is often advantageous to have about four serious bidders; and auctions should sometimes be conducted in phases. An external verification system demonstrates both to the government and to citizens that the auction adheres to international standards. Expertise can be hired in the market, but a verification system may need to be official to have authority. A verification system for Africa would thus be a *regional public good* — one which the African Development Bank would be well-placed to develop and supply.

Source: Collier (2007b)

such as total royalty, then other aspects of the contract (risk sharing, knowledge transfer) have to be established in some way and imposed as constraints in the auction of rights.

Revenue Transparency and Public Financial Management: Governments implementing prudent policies often choose to use resource revenues to cut government debt or to invest in useful education and infrastructure projects. Whichever strategy is chosen, all natural resource exploitation activities should be governed by the highest standards of public and corporate accountability and transparency. Accounts related to the production and export of resources should be available to journalists, financial analysts, and the general public. Open information on debts, credits, and loans, for example, should also be provided in resource-rich countries since governments may be tempted to “loot the public purse” by saddling future generations with excessive debt using natural resource reserves as collateral. Unfortunately, at present many countries affected by the natural resource curse do not make information on their export earnings or revenue expenditures available to the public.

Awareness about these issues has been growing, as have several promising responses, which include the Extractive Industries Transparency Initiative (EITI) and the African Peer Review Mechanism (APRM), reviewed in Chapter 5 of this Report.

Timing and Composition of Expenditures: Even if political economy challenges are overcome, another crucial issue that should

be addressed concerns the best way *to spend accrued revenues*. In broad terms, the possible approaches include:

- i) accumulation of foreign assets;
- ii) domestic investment — public or private;
- iii) domestic consumption — public or private; and
- iv) savings or investment funds.

Making the right choice, or mix of choices, depends on income information (resource reserves, future prices, and rates of return) and the political economy in place in the country at the time, all of which are highly uncertain. One of the characteristics of most natural resources is the highly volatile nature of commodity prices and revenues, such that short-run smoothing is required to avoid boom-bust cycles. Issues such as long-term absorption and depletion rates also have to be addressed.

The first choice deals with consumption and investment — how much of the resource revenue should be consumed now and how much saved for future generations? The consumption stream that can be supported in perpetuity is the present value of the resource stock times the rate of return. The *share* of resource revenue that can be consumed in perpetuity is the expected long-run rate of growth of the resource price divided by the extraction rate. Both of these rules give steady consumption paths that do not fluctuate with short-run revenues, although they are, of course, subject to revision as information and expectations change.

The second choice concerns how the remainder (of the income) should be invested or allocated between domestic and

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foreign assets. A sound first criterion is that foreign assets should be used to reduce volatility and secure short- to medium-run smoothing of domestic expenditures (consumption and investment combined). Such an approach involves forming a judgment about the expected long-run revenue path and natural resource export price paths (depending on market sentiments) and using foreign assets to smooth deviations from these paths. The longer-term division of investment between foreign and domestic assets needs to be addressed. A simple criterion could be to invest wherever the social rate of return is highest, which, in a capital-scarce developing country, will often be predominantly domestic investments.

Another important priority choice concerns whether consumption or investment should be private or public. Private expenditures could be promoted by tax cuts and low levels of public debt rather than by direct public expenditures on social policies and infrastructure. Whether private expenditures are more efficient than public expenditures depends on the economic environment, in particular, access to capital markets, and on attitudes to intergenerational distribution of benefits. The efficiency of public expenditures depends on both the quality of project selection and the procurement practices used to implement projects.

Stabilization Funds versus Citizen Dividends: Since streams of natural resource revenues do not last forever and may fluctuate considerably, it is, in principle, sound practice to put a proportion of export revenues from natural resources into stabilization funds. This way the nation can

spread the benefits of its natural resource wealth over a long period, protect itself against volatile commodity prices, and safeguard the interests of future generations. However, a crucial drawback is that in a regime where there is weak institutional capacity and low transparency and accountability, such a fund may be raided. Keeping natural resources under the ground may be a safer form of saving than putting it in a fund that is easily raided. In applying the concept of future funds, African countries would be well advised to look towards the lessons learned from both Africa itself and from the developed world on managing mineral rents for the benefit of future generations. Norway is a prime example of a country that manages its resources with a clear “futures perspective” (see case examples in Box 6.5 and 6.6). The need for professional management and administration of future funds is obvious.

Another approach is to distribute rents from natural resources, automatically and instantaneously, directly to the citizens of the resource-rich country.² Such a “citizen rent” should correspond to government revenues. The right of each citizen to an equal share of natural resource rents could even be inscribed in the constitution to establish the legal default of full direct distribution of resource revenues to the people. Given that citizenship or residence will be an eligibility criterion for receiving the resource dividend, there is a clear danger of leakage and fraud. However, the administrative costs should be manageable.

² Sala-i-Martin and Subramanian (2003)

Box 6.5: “Failure Case Study” on a Future Fund — Chad

The problematic future funds initiative of Chad’s oil industry should serve as a key lesson for other African nations. The process began in 2000 with a proposal for an oil pipeline running from Doba (Chad) to the Atlantic coast (Gulf of Guinea) in Cameroon. Under the deal agreed by stakeholders, most of Chad’s revenues would go toward development projects. The agreement required that Chad’s 12.5 percent share of direct revenues from oil production flow be put a London-based Citibank escrow account to be monitored by an independent body created to oversee the account’s management.

Another main goal was to channel Chad’s revenue into poverty-reduction programs. The Future Generations Fund accounts for 10 percent of annual revenue and was created to provide Chad with reserve funds after oil reserves are exhausted.

The USD 3.7 billion project began pumping oil through the pipeline in late 2003 — ahead of schedule. In December 2004, Chad’s parliament voted to modify the agreement, canceling the Future Generations Fund for Chad’s post-oil future, and diverting funds away from poverty alleviation towards the purchasing of arms. A temporary agreement was reached with development partners on April 27, 2005, but experts say potential civil war, cross-border troubles with Sudan, and the weakening of the current political regime still threaten the pipeline deal, casting further doubt on prospects for transparency in future development projects in the region. Meanwhile, the Future Generations Fund (FGF) is still kept in the London-based escrow account, and is invested in an interest-bearing investment account.

Source: Zissis (2006)

Box 6.6: “Success Case Study” on a Future Fund — Norway

The Norwegian future fund was established in 1999, based on government revenues from the North Sea oil discoveries of the 1990s; it was designed specifically to meet the future pension needs of the nation. The fund holds more than USD 300 billion and is projected to rise to USD 900 billion in the next decade. Norway’s population is slightly under 5 million, and its holdings could theoretically enable the entire population to “retire” on an equal payout of USD 220,000.

The fund is also a tool that ensures the transparent use of petroleum revenues. All revenue from the sale of North Sea oil is directed into the fund. This capital is invested outside Norway to counter any rise in the real exchange rate resulting from oil exports (capital outflows cause the exchange rate to depreciate). Investments are subject to ethical guidelines and an environmental sub-fund is part of the portfolio. The country’s Central Bank, manages the fund.

Sources: Norway Mission to the EU (2005); Norwegian Ministry of Finance (2005)

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In such cases, the government could subsequently tax its citizens to fund investment projects, reduce government debt, or transfer revenues to a fund. The resource rents could, in principle, also be used for micro-finance and housing guarantees, or tied to social targets such as the MDGs.

The great advantage of this approach is that the burden of proof lies primarily with the government, which has to explain why it wants to spend money and gain public support for its plans before it can tax its citizens. Citizens may not use their share of natural resource revenues wisely either, but less resources will be wasted on corruption and rent seeking. Other weaknesses are that it will be difficult to ensure inter-generational equity and to address the Dutch Disease syndrome (over-heating of the economy for example). A distinction can be made between an *endowment* effect, which argues that people put more pressure on the government to abide by the principles of good governance as they feel the cost of waste and corruption as an out-of-pocket cost, and an *information* effect, which stresses that people get better informed about the magnitude of the resource rents and how these are spent. Of course, a key issue once more is how to implement such a natural resource dividend *in practice* and how to address the weaknesses and overcome opposition from vested interests. Each unique case (country or resource) clearly requires further discussion and analysis.

Implications for Donors

The question of how resource windfalls can be successfully harnessed to make a

significant contribution to Africa's economic growth and development has become a central concern for the donor community in Africa. The analyses presented in this Report reveal the existence of a unique opportunity for donors and multilateral financial institutions to influence the role of resource wealth in addressing Africa's development challenges. In particular, the issues discussed below are critical in defining a donor focus.

Enhancing the Development Impact of Africa's Natural Resources: Given the inextricable linkages between natural resources and Africa's economic performance, the main challenge is how to achieve effective natural resource management that will provide sustainable growth and reduce poverty in Africa. This leaves clear room for multilateral financing institutions (MFIs) and donors. By virtue of their development activities, donors and MFIs have strong leverage that would allow them to focus on forging linkages to key areas, thus enhancing the development impact of Africa's natural resource wealth. Crucial areas include the following:

- Investing in physical and social infrastructure for future growth and development, and ensuring a holistic approach and sustainability beyond mining and other natural resource exploitation;
- Using the infrastructure developed with mineral wealth (transport, power, communication and water facilities) to systematically exploit the potential of non-commodity sectors such as agriculture, forestry, and

tourism;

- Using available raw materials (natural resources) to establish downstream industries for manufacturing and side stream sectoral linkages;
- Establishing industries to supply the natural resource sector with inputs, and achieving sectoral linkages;
- Supporting technical development and innovation by investing in research, and supporting the technological innovation to migrate to other sectors beyond mining;
- Facilitating the monitoring of natural resources and data compilation — securing regular data compilation and systematic approaches that will include the generation, maintenance, and utilization of natural resource data bases for development planning.

These areas and the highlighted linkages can serve as the starting points for various ways of linking natural resource wealth use to development operations — some of which are further described below.

Policy Dialogue and Budget Support: In recent years, aid delivery to Africa has shifted progressively from project support to more upstream, higher-level, programmatic support, sector support, and technical assistance. This shift should be embraced and taken a step further in order to enhance the development impact of natural resource wealth. For example, General Budget Support (GBS), one of the most important of these upstream aid instruments for pooling donor resources directly into national budgets, can be used to emphasize

development priorities aimed at improving the development impact of natural resources. New strategic thinking is also needed on the best way of coordinating conventional multilateral and bilateral aid to ensure that it serves as a conduit for mobilizing resource windfall revenues for the effective development of African economies. Such a strategy and dialogue could focus on the following actions and measures.

- Ensuring that General Budget Support (GBS) promotes multi-sector policy dialogue and coherence, creates a policy space for mainstreaming natural resource wealth into development, and generates economic growth;
- Making sure that GBS emphasizes and strengthens financial budgetary discipline — this discipline should be extended to the management of natural resource wealth in resource rich countries and should include relevant ministries and departments;
- Enhancing policies and programs that foster the contribution of natural resource wealth to economic growth, social equity aimed at achieving social stability, and poverty reduction;
- Facilitating economic diversification to ensure investment of resource wealth in non-resource sectors, human capital development, and infrastructure development;
- Strengthening natural resource management capacity by placing greater emphasis on internal management capacity, including on governance and democratic processes;
- Supporting the management of wind-fall rents, in particular, ensuring

that windfall rents are equitably appropriated. The management of large inflows should ensure that the income does not distort the economy. Options include investing in stabilization funds, citizens' funds and future funds. Some of these could be offshore funds and committed to long-term infrastructure development.

- Using GBS to forge linkages in order to articulate issues related to transparent decision-making on natural resource matters, so that spending plans and appropriations are subject to more stringent monitoring. This can be done through initiatives such as the African Peer Review Mechanism (APRM). Oversight should be prepared and plans and implementations should increase national and citizen ownership of natural resource wealth spending priorities.

Fragile States: The management of natural resource wealth in fragile African states is important for Africa's development. The continent has more fragile states than any other continent — and many of these countries are rich in natural resources. The strong overlap between poorly performing resource-rich countries and countries that are widely accepted as being fragile is apparent from the analysis in this Report. From both spatial and temporal perspectives, circumstances that engender state fragility take different forms in different countries, and may also take different forms even within the same country. These differences have major implications for the scope and nature of engagement by

development partners. In other words, a uniform approach to widely differing circumstances of state fragility may have several shortcomings on the ground, thus failing to produce results. The African Development Bank's strategic approach, which defines its engagement in fragile states — in partnership with other donors — includes:

- Focusing on prevention, policy dialogue, and support for improving governance;
- Remaining engaged and building a knowledge base (for instance, stakeholder analysis and engagement);
- Focusing on post conflict/crisis reconstruction, in particular, on turn around and graduation;
- Fostering stabilization, graduation, reform, and normalization.

The proposed framework (also refer to analysis in Chapter 4) focuses on addressing the risk from slippage (for instance, renewed conflicts) and helping weak and post conflict countries advance their political and stabilization processes. This would ensure that natural resource wealth is better harnessed and used for development.

Institutional Issues and Governance: Governance issues remain a critical challenge in the management of Africa's natural resource wealth for development. Donors and MFIs are exerting a concerted effort to use good governance principles to increase the contribution of resource wealth to Africa's development. Current institutional changes in Africa, which have led to the emergence of the African Union (AU)

and associated initiatives such as the New Partnership for Africa's Development (NEPAD) and the African Peer Review Mechanism (APRM), provide a unique framework for addressing governance issues in the management of natural resources. NEPAD's identification of good governance by NEPAD as a basic requirement for peace, security, and sustainable growth and development provides an entry point from which development partners can forge linkages to natural resource sectors. To this end, donors would have to play a critical role in the following areas:

- Improving accountability and transparency in the management of natural resource wealth for Africa's development;
- Supporting central governments in effective planning and management of natural resource wealth for development;
- Shoring up relevant local institutions and civil society organizations;
- Strengthening regional bodies involved in the management of natural resources, ecosystems and related services, helping them overcome challenges stemming from political cross-border issues.

Africa-Asia Trade Partnership: The focus of the long-standing partnership between Africa and Asia, which ranges from development assistance to trade, has recently shifted to Africa's natural resources. The partnership, and the attendant challenges and opportunities, has serious implications for the management of Africa's natural resources to enhance economic growth.

Opportunities have emerged with the increase in investments and in capital flows from Asia to Africa, and the possibility that such investments entail transfer of skills, know-how, and low-cost technologies that improve efficiency. In resource-rich countries, however, the increased Asian involvement may lead to increased specialization in unprocessed commodities and to vulnerability.

For Africa's development partners, including the African Development Bank, there is a unique role to play to ensure that first, Africa clearly defines the kind of partnership that (ideally) should be pursued with China, India, and other nations scrambling to gain access to Africa's natural resources. Second, efforts are made to ensure that Asian countries (or any other countries) do not free-ride on the initiatives of other donors to reduce the debt burden of African Countries (through the Heavily Indebted Poor Countries' Initiative (HIPC) and the Multilateral Debt Relief (MDRI)), for instance, by extending new credits or loans with special conditions that may, in fact, increase Africa's debt service burden. Key areas of action in articulating Africa's benefits from the natural resource partnership with Asia (and others) include the following:

- Ensuring that foreign investments in the exploitation of Africa's natural resources are directly coupled with transfer of skills and technology to Africa. With their low-cost technologies, Asian firms can create conditions that increase productivity and improve the competitiveness of African firms in global markets.

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- Ensuring that Asian firms provide capital goods and intermediate inputs, which would allow African firms to diversify and manufacture potential export products, aimed in particular at other developing countries, thereby boosting trade;
- Building capacity to strengthen Africa's technical knowledge of its resources, data, and research to increase its bargaining power during contract negotiations, and in the articulation of mining-related externalities that may need to be compensated by miners (investors); and
- Ensuring that there is no free riding that will dilute the positive effects of the HIPC and MDRI on Africa's development.

Environment and Climate Change: Climate change is expected to have a profound and irreversible impact on Africa's economic, social, and environmental systems. This is already evident in the increased frequency and intensity in the occurrence of natural imbalances and climate-related disasters on the continent — recurrent droughts, floods, and erratic rainfall. Climate change thus has a direct and important linkage to the management and sustainability of Africa's natural resources.

Because climate change affects and threatens the sustainable use of natural resources, it is critical that donor and MFI efforts integrate climate change adaptation to ensure sustainability. The bulk of renewable resources, including agricultural land, fisheries, livestock, water, tourism,

natural parks, and coastal resources, are directly affected by climate change, with potentially dire consequences and increased poverty. This has a strong implication for development planning in the context of natural resource management. Donors, development partners, and African countries need to focus on the following issues to streamline climate change into natural resource management:

- The challenges and opportunities related to promoting low-carbon development. This needs considerable attention — in particular, how to finance climate change and how to mainstream it into NRM-related development assistance, including technology transfer and carbon trading;
- NRM opportunities related to climate adaptation — how natural resource wealth can be used to support climate risk management and how it can be mainstreamed into development assistance;
- The role of governments, financial institutions, donors and the private sector; and
- Bridging the financial gap for adaptation with existing or new financial instruments, and the specific challenges that these will pose for resource-rich African countries.

Overall Conclusions

Many African countries are endowed with natural resources, but this has not always been a blessing. In other countries, poor management has led to overexploitation of natural resources, resulting in environmental

degradation and increased poverty. In many other countries, however, natural resources are considerably underutilized or are available in sufficient amounts to provide significant opportunities that Africa could take advantage of to propel its economies and drive its development and poverty reduction efforts. If well managed, Africa's resources could stimulate growth and multiplier effects on the continent. These issues point to the need for Africa to take the lead in its development process, and to strengthen support and initiatives aimed at ensuring that resource revenues are managed with a higher level of transparency and good governance. This can be accomplished by reinforcing institutional capacity, investing in the creation of knowledge for innovation, and integrating the natural resources sector into overall economic planning and development efforts.

The experience of African countries reveals that natural resource endowment especially in non-renewable resources, comes with opportunities but also with substantial risks. The key challenge for harnessing natural resource opportunities is achieving the right strategic choice in resource and economic policies and synchronizing their implementation in a context that supports fiscal prudence and eliminates macroeconomic distortions. This should be backed by adequate institutional capacity and national and local level participation in natural resource management. Getting the policies wrong, disregarding their sequencing and alignment with the rest of the economy, or ignoring absorptive capacity and good governance

issues may transform a natural resource boom into a curse that could effectively stall economic growth, worsen the poverty situation and become a recipe for social and political instability. With a few exceptions, notably Botswana, many resource-rich African countries have been victim to this scenario, albeit to varying degrees.

In addition, many resource-rich African countries suffer from real appreciation of their exchange rates induced by huge resource export revenues and aid flows. Consequently, Africa's pathway out of the natural resource dilemma lies primarily in sound fiscal policies and economic planning to ensure sufficient investment in productive and human capital. While the potential for such long-term investments exists, most resource-rich African countries have yet to exploit it. Although such a task (priority) is noted to be difficult, particularly in a global economy characterized by volatile commodity prices and export revenues (hence difficulty in planning public expenditures), the task is quite achievable with appropriate measures and concerted support from donors (especially in the context of budget support).

Many African governments have made concerted efforts to move away from state-controlled economies towards market-oriented systems — an important step to integrating with the global economy. This, coupled with rising commodity prices, potentially larger revenue incomes, and an increased tendency to channel natural resource revenues to expenditures on education, health, and other social services (albeit, still largely insufficient) provide some optimism for the future.

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Sound environmental management and, not least, effective governance, have to be high on the agenda to ensure that Africa's natural resource wealth generates more rapid development and poverty reduction. Pro-poor governance, or governance that supports rural development and poverty reduction, should define the focus of development orientation, and the needs of the poor should be consistently reflected in development planning and in the use of natural resources. This would build a sound basis for economic growth, social equity, and stability. In the African context, these issues remain crucial for minimizing social tensions and the subsequent conflicts and wars relating directly or indirectly to natural resource wealth. The often observed situation of the elite capturing disproportionately large shares of Africa's

natural resource wealth while transmitting the associated externalities and other social costs to marginalized populations is unsustainable and unacceptable. Such conditions are root causes of natural resource conflicts and the derived social and political consequences. Experience with resource-rich African countries shows that institutional and governance failures may lead to, and indeed be reinforced by, resource conflicts — leading to further underdevelopment and resource degradation. This Report has identified the fundamental elements that should underpin the use of natural resource wealth to foster development and economic progress in Africa. Essentially, this involves securing the fundamental democratic principles that ensure accountability, public participation, representation, and transparency.