

AFRICAN GOVERNANCE REPORT V

NATURAL RESOURCE GOVERNANCE AND DOMESTIC REVENUE MOBILIZATION FOR STRUCTURAL TRANSFORMATION



United Nations
Economic Commission for Africa

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Acronyms

ECA	Economic Commission for Africa
GDPG	Gross Domestic Product
OECD	Organisation for Economic Co- operation and Development
UNCTAD	United Nations Conference on Trade and Development
UNDP	United Nations Development Programme
UNRISD	United Nations Research Institute for Social Development
EITI	Extractive Industries Transparency International
IBP	International Budget Partnership
AMDC	African Mineral Development Center
NRGI	Natural Resource Governance Institute
AMV	African Mineral Vision
AU	African Union
FAO	Food and Agriculture Organization
USAID	United States Agency for International Development
ICGLR	International Conference of the Great Lakes Region
HIPC	Heavily Indebted Poor Countries
SADC	Southern African Development Community
AfDB	African Development Bank
IMF	International Monetary Fund
AUC	African Union Commission
ILO	International Labor Organization
LDCs	Least Developed Countries

Foreword

Africa is endowed with huge untapped renewable and non-renewable natural resources that account for about 30 per cent of the global supply of mineral resources and 8 per cent of the world's stock of oil reserves. These resource endowments present both opportunities and challenges to promoting sustainable development on the continent. Today, more than 70 per cent of total African exports derive from the oil, gas and mineral sectors, which account for about half of Africa's gross domestic product and contribute significantly to government revenues. Resource revenues represent on average about 40 per cent of domestic public revenues in Africa.

As this fifth edition of the *African Governance Report* demonstrates, many natural resource-rich African countries have not managed their natural resources to increase government revenue and foster inclusive and transformative growth. Indeed, heavy dependence on commodity exports, combined with commodity price volatility, have resulted in high fiscal and current account deficits, reduced domestic tax revenues, low investment rates, limited diversification, slow growth, and rising inequality and poverty in several African countries. For instance, the fall of world commodity prices (especially of oil) in 2012, and the resulting decline in resource revenues (43.7 per cent) caused a sharp decline in public domestic revenues (22 per cent). In some extreme cases, resource endowments have been linked to economic vulnerability, social tension, political instability and violent conflict.

Improving the governance of Africa's abundant natural resources, particularly by strengthening institutions and policy frameworks, will reduce the inherent risks and enhance revenue mobilization,

providing opportunities to achieve the Sustainable Development Goals (Agenda 2030) through increased investment, employment and poverty reduction. This report emphasizes the role of the state in long-term development planning as a tool for good governance of natural resources. It also emphasizes formulating a strategy to foster diversification and structural transformation and to address such cross-cutting issues as promoting social inclusion, combating corruption and protecting the environment. Natural resource governance thus needs to be more broadly conceptualized to encapsulate the principles of transparency, accountability, participation and sound economic management.

African countries must strive to build strong and efficient institutions for planning and implementing sound development strategies to manage their natural resources for more impactful development outcomes. These strategies must include industrial policies that foster value addition and promote the domestic private sector as part of wider value chains linking national, regional and global enterprises. Upstream linkages opportunities, through local content and value added policies, provide a catalyst for industrialization of the economies of mineral-rich African countries. This is more so if we consider the fact that for a typical mining project, government revenues from taxation only accounts for about 17% of total revenues over the life time of the project. Meanwhile, over 60% of operational expenditure in a typical mining project relates to procurement of mining inputs - equipment, service and consumables. Also essential is speeding up reforms to strengthen domestic revenue mobilization and ensure better resource-sharing mechanisms.

Vera Songwe

United Nations Under-Secretary-General and
Executive Secretary of Economic Commission for Africa



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Executive summary

Africa is hugely endowed with diverse natural resources, including land and water for agriculture, forests for wood and non-wood forest products, and minerals, oil and gas for mining. For decades the direct exploitation and use of these natural resources have dominated the continent's economies and the livelihoods of most of its population—and, to a lesser extent, its public domestic revenues. But Africa's

overriding strategy of exporting commodities in their raw, non-valued-added form has failed to produce sustainable inclusive growth, improve people's well-being or diversify and transform its economies.

These poor development outcomes reflect multi-decade challenges in natural resource governance, including:



Structural dependence of many resource-rich countries on one (or very few) primary export commodities.



Demand and price volatility of these commodities, complicating most countries' political economy.



Weak institutional frameworks for natural resource governance, including poor policy coherence, implementation and enforcement.



Absence of comprehensive long-term planning to integrate the sector into others and poor execution of development plans.



Inconsequential revenue generation from natural resources and flawed resource management strategies.

African Governance Report V examines efforts to improve the governance of Africa's abundant natural resources, with particular emphasis on strengthening natural resource governance institutions and frameworks for the enhancement of domestic revenue mobilization and engendering economic diversification and structural transformation on the continent.

Case studies from eight African countries (Botswana, Cameroon, Cote d'Ivoire, Egypt, Madagascar, Nigeria, Tanzania and Uganda) buttress the diversity in natural resource governance. Those countries represent different geographical regions with diverse political, economic, social and environmental contexts. Some countries are very dependent on

extractive resources while others have relatively diversified sources of revenues. Some states have weak institutional capacities while others exerted improvements in terms of renewed state legitimacy and state capability. And most countries have similar challenges pertaining to the dynamics, policies and approaches for managing natural resource revenues. The report therefore addresses four broad issues.

FOUR ISSUES

Resource-rich African countries' inability to transform their economies

Africa has recorded impressive growth in the last decade or so but has not created enough formal-sector work (especially for young people) or reduced poverty and inequality. Economic diversification, structural transformation and productivity growth remain limited. Such shifts—hallmarks of development in advanced and newly industrialized countries—demand a move in investment from low- to high-productivity activities within and between sectors, notably to manufacturing and modern agriculture and services. Such changes create stable and productive employment and distribute income more equitably. Botswana, even with limited diversification, managed to maximize the development outcomes from natural resources because of effective deployment of resource rents.

Many African economies' dependence on natural resources—and those resources' limited linkages to other economic sectors—explains the countries' inability to spread growth to other sectors and across the population. About a quarter of Africa's growth since 2000 has come from commodity exports, reflecting burgeoning global demand (boosted by China). Africa's commodity exports are mainly resources in their primary form, taken from the earth and exported

with little subsequent processing, refining or beneficiation in Africa. Exports of agricultural products—the sector is the source of work for around two-third of Africans—similarly undergo little agro-processing or value addition.

Although mining and fuel extraction contribute a great deal to GDP growth, they have not created the number of jobs—let alone decent jobs—proportionate to the revenues they generate. This resource dependence has exposed many African countries to fluctuations in commodity prices and volatility in economic growth, as well as to social tensions, political instability and, in some cases, civil conflict.

High commodity prices increase export revenue, widen fiscal space and lift economic growth in most resource-dependent economies—often suddenly and for a few years only, in a boom. The downside is the pretty inevitable bust and, often, long periods of slow growth or even recession. Unless governments have saved some of their windfall (few do), they have nothing with which to smoothen spending over the economic cycle. This dependence frequently reveals itself in poor socio-economic outcomes, a pernicious link nicely caught in the term “resource curse”. Food and fuel import dependence can also undermine macroeconomic performance through inflationary pressure, deteriorating foreign exchange reserves and large swings in the terms of trade.

The institutions for improving the development impact of Africa's natural resources

The natural resource sector affects a country's governance in several ways: a corroding effect of natural resource revenue on governance and institutions, which creates an environment for rent seeking and thus diverts into private hands the public resources that could be used for development; revenue unpredictability, which mars attempts to plan for the long term; and an overvalued exchange rate, which hurts exports from other sectors. Weak institutions' inability to mitigate the impacts of these external shocks feeds

into the continent's transformation challenge, undermining the state's capacity to implement wider development strategies.

In upgrading the institutions that are so vital to “good” natural resource governance—that is, making them transparent, accountable and participatory—African governments have focused on maximizing export and tax revenue from natural resources. This perspective has influenced how they write laws (plus some constitutions) and design public institutions. But to set the foundations for structural transformation—including promoting inter-sectoral links from the natural resource sectors and encouraging economic diversification—good natural resource governance has to be more broadly conceived and to be anchored on a value-chain approach to resource planning and governance.

The limitation of government policies to promote their economies' productive capacities and abilities to compete on international markets has left a legacy of misaligned incentives and inadequate institutions that threaten political stability and even social cohesion. Mechanisms for enforcing the elements of natural resource governance are weak and will need compelling efforts from all parties, governments particularly.

Development planning and African policy outcomes

The paucity of strong planning and governance institutions is one of the key reasons for Africa's suffering from the resource curse. The history of Africa's natural resource-based development planning is marked by incoherence and by poor implementation and monitoring. But today, with solid, long-term resource-based development plans, African countries probably have more opportunity than they have ever had to lift themselves and sustain the growth needed to create decent jobs for Africa's fast-growing population. The test for African policy makers will be to use natural resources to

foster new industries that add value to commodity endowments and that branch into new labour-intensive modern manufacturing sectors.

Long-run outlooks are crucial for governments receiving resource windfalls. A sudden inrush of revenue can weaken their financial prudence when they attempt to meet the populace's now-high expectations, leading them to make bad policy that achieves no social value. It may even prompt governments to pursue strategies that stifle rather than promote industrial development.

Conceiving of how good natural resource governance could increase domestic revenue for structural transformation in Africa requires broadening current dominant approaches to natural resource governance to embrace principles that aid the realization of transformative outcomes. These additional issues include the centrality and role of development planning, ownership and control of resources, economic diversification strategies and the effects of international markets on natural resource governance.

Raising domestic revenue in Africa

Africa's funding needs outstrip its current domestic revenue capabilities, owing to its low domestic savings, shallow capital markets, weak financial intermediation, large informal sector, illicit financial flows and challenges of public financial management and governance.

The most sustainable path to economic development and transformation is domestic revenue mobilization, as underlined by the global financial crisis and by the more recent commodity price decline after 2012. Yet the large informal economy is beyond the reach of the taxing state, many workers do not earn taxable wages and a large share of saving is held in forms that cannot easily be invested.

Domestic revenue mobilization must be strengthened because it can be a powerful tool

for achieving national ownership of development strategies; for deepening participation of domestic firms in regional and global value chains; and for boosting the state's capacity to provide public goods and services. African countries have shown encouraging domestic revenue mobilization trends in recent years, with rising tax-to-GDP ratios and improving tax collection efforts. In African economies domestic revenue mobilization averages 70 per cent of development finance, with the rest from loans or aid—once again underscoring how vital domestic revenue mobilization and natural resources are.

KEY MESSAGES

Africa has been slow to convert its natural resources endowments to tangible development outcomes because of weaknesses in governance and the wider capacities of the African state. A capable state with legitimacy and political will (represented by strong, transparent, accountable and development-oriented institutions) is needed to minimize harm from exploiting resources and to maximize positive development outcomes. It should use regulatory, planning, and revenue and expenditure tools, as well as industrial policies.

Good natural resource governance requires that institutions—formal and informal—be mandated and capacitated to manage resources efficiently and to formulate, implement and enforce sound policies and regulations. Institutions must be held accountable for their decisions and must ensure that decision-making processes are transparent and widely participatory.

The quality of institutions is a deciding factor on whether natural resource wealth becomes a blessing or curse for inclusive and transformational development, peace and security, deeper democracy and environmental protection. The quality of institutions governing revenue management shape the resource rent-sharing framework and the context in which these resources can be applied to development. But when institutions collapse or malfunction, the consequence may be disorder.

Many African countries are applying concurrent governance frameworks backed by donor countries and international institutions, adding a layer of externally oriented accountability that does not always support mutual reinforcement of domestic institutions and regimes or intra-African cooperation and shared learning. Moreover, the strong focus of these external frameworks on revenue flows suggests that they limit the potential of natural resource wealth on broader development outcomes, including their potential for technology development and economic diversification.

Ownership rights to natural resources pose one of the challenges of good resource governance in Africa. In many countries ownership rights are vested in the state in trust for the community. However, this ownership arrangement is a means of control by the political elite and with widespread opacity in the management of resources. The executive wields significant control over the resources, which also compromises oversight by the legislature, in law and practice, with many countries experiencing unaccountable use of resource revenue, weak budget discipline and poor transparency.

Revenue governance is plagued by poorly designed systems of revenue sharing between extractive companies and national governments and between national and subnational governments. In addition, the absorption capacity of recipient authorities tends to be weak, often leading to corruption, regional (and other) inequalities, or even conflict.



Natural resources are major contributors to public domestic revenue in Africa, largely expressing the structural dependence of resource-rich African economies on one or a few raw material export commodities and hence their vulnerability to price and demand volatility. However, the natural resource sector offers Africa the potential to drive growth and provide the revenue base for financing development, but it is fraught with challenges, requiring all stakeholders—governments, private sector and civil society—to engage in reforming natural resource governance.



Good natural resource governance must be underpinned by resource-based development planning. Planning is also necessary to catalyse

links between and within sectors and to foster economic diversification. Such diversification, as well as links from the natural resource to other sectors, adds value through beneficiation, leverages the development of other sectors and can inject innovation into the economy, as steps towards catch-up with advanced economies.



As part of wider governance reforms for the natural resource sector, greater engagement of the private sector is required. This will optimize resources from natural resource rents and expand the revenue base, attracting foreign direct investment. The decision-making chain of government should follow the entire value chain from information on resource deposits, to deal making, development, extraction, downstream value addition and project closure.



Other issues requiring attention of African governments include increasing cooperation on extractive fiscal issues to stop any “race to the bottom” in mutually destructive tax competition and to harmonize extractive sector fiscal regimes across the continent.

POLICY RECOMMENDATIONS

The policy measures needed for countries to convert these natural resources into sustainable development are vast yet context specific. There are significant governance capacity development needs that will enable governments to ask the right questions and consider all the risks. This is an incremental process that is finessed through learning by doing. Countries have learned a great deal since the commodity super-cycle. The fact that macroeconomic imbalances are not out of control despite the current downturn testifies to this learning. This optimism, more than anything else, lends support to the view that it is in the power of African governments to prudently manage the risks associated with natural resource booms and busts in order to maximize development outcomes.

1 Strengthening institutional and regulatory frameworks

To succeed in leveraging natural resource wealth for sustainable development and economic transformation, African governments should adopt and apply a broad definition of resource governance—encapsulating principles of transparency, accountability and impact on people and nature, to underpin policy design and practice of state institutions. Governments should ensure that natural resource wealth does not undermine good governance, including democratic practices, and that it translates into environmental protection and a better quality of life. Moreover, countries need to build long-term human, financial and institutional capabilities to independently design, implement and monitor policies, strategies, regulations and other mechanisms aimed to effectively, efficiently and sustainably manage natural resources.

2 Enhancing transparency and accountability in economic governance

Ensuring transparency throughout the decision-making chain (from information about resource deposits to deal making, development, extraction, downstream value addition and project closure and rehabilitation) facilitates government accountability to stakeholders. The key to transforming natural resources into sustained prosperity is to build in transparency and accountability into this chain and support inclusive decision making over the long-term. Governments and other stakeholders should ensure the availability of natural resource-related information laws, rules and regulation at high level of detail that can be easily and publicly accessible and utilized for decision-making or advocacy purposes. This will help build or strengthen public confidence and it will demonstrate countries' commitment to good governance.

3 Prioritizing and bolstering resource-based development planning

Resource planning should be an integral part of an inclusive national development plan complemented by sectoral and decentralized planning. More harmonized and coordinated policies and approaches will help leverage high-value natural resources to finance development priorities. Resource revenues represent long-term financial assets that can be invested into building state capabilities as well as developing and incorporating tools and trainings programs into long-term planning. Furthermore, mainstreaming the laws and rules regulating the planning, development and governance of natural resources into comprehensive frameworks will help address the common challenges of policy dialogues, impactful implementation, and development outcomes, particularly among decentralized coordinating, implementation, statistical, and geological agencies.

4

Accelerating diversification and expanding links for structural transformation

Diversification and link strategies are necessary for industrializing through natural resource endowments, creating jobs and sustaining revenue generation. As such, governments should promote policies that aim to foster economic diversification, accelerate industrial development, and support innovative mechanisms for channeling natural resource revenues as well as domestic savings and revenues into sustainable development activities. Moreover, countries should reinforce their commitment toward more comprehensive resource-based development strategies that systematically integrate the linkages between diversification, downstream and upstream sectors, soft and hard infrastructure, technological innovation, and broad-based human development into processes for the coordination and implementation structural transformation policies and strategies at sub-national, national and regional levels.

5

Strengthening domestic revenue mobilization

Governments need to respond to several factors undermining domestic revenue mobilization

from the natural resource sector. For instance, they should: ensure that domestic revenue mobilization decision-making follows the entire value chain. This should be closely correlated with the need to harmonize resource sector fiscal regimes and invigorate public financial management and accountably. To mobilize greater revenues, governments must strengthen their financial institutions and customs to combat illicit financial outflows. The private sector must play a more prominent role in African countries' efforts to diversify their economies and mobilize domestic revenues. In that respect, governments should support measures aimed at facilitating the participation of local enterprises, as well as develop and implement local content policies to expand benefit sharing large foreign firms and local economies.

6

Improving resource-sharing mechanisms

To staunch deepening inequality and poor development outcomes in resource-rich African countries, governments should: reform their resource-sharing systems to optimize revenues transferred to subnational governments, equitably, and improve absorption capacity by recipient authorities, to limit corruption, regional inequalities and potential for conflict.

The background is a solid blue color. In the top right corner, there is a dark blue vertical rectangle with an orange U-shaped outline. On the left side, there is a large orange shape with a rounded top and a white pill-shaped cutout. A white horizontal line with rounded ends extends from the left edge, passing behind the orange shape and ending in a semi-circle that frames the number '1'.

1

**A proposed analytical
framework and actual
development outcomes**

Africa is the continent most dependent on natural resource wealth, notably extractive resources (metals, oil and gas) as well as forests, land and water resources. At the peak of the resource boom of 2011–2012, Africa's rents (or extraordinary profits from exploitation), especially those from extractive resources, averaged above 25 per cent of gross domestic product (GDP). This was more than five times the world average and 15 times the average of Organisation for Economic Co-operation and Development (OECD) members.

The contribution of natural resource rents to total exports is also high, averaging over 88 per cent in Nigeria and 77 per cent in Botswana in 2016.¹ Measured by contribution to revenue, the picture is similar, exceeding 70 per cent over the past two decades in Nigeria.² These levels of dependency may be at the extremes when compared with non-mineral exporters (including non-oil and gas exporters). They are not typical when viewed by the share of natural resources in the total wealth of countries or by their contribution to livelihoods.³

BOX 1.1

Growth for all Africans, from Africa

Natural resource abundance can contribute to economic growth if resource rents are invested in physical assets and other forms of productive capital (Van der Ploeg and Venables, 2012; Vandycke, 2013). Africa therefore needs to revisit the role of natural resources in development by, among other things, deepening their integration into broader national planning processes and strategies (Campbell, 2012). Its countries have suffered excessive change: instability and radical shifts in prices, rates of exchange and so on.

Because of high dependence on the export of primary goods with volatile prices, political instability and a raft of damaging policies implemented under structural adjustment and poverty reduction strategy programmes, a great deal of development in Africa is bifurcated (Bush and Harrison, 2014), with unsatisfactory outcomes. A dualism has emerged: short-term, low profit margins, and often desperate activities of many in the informal sector (see Box 4.4 in Chapter 4), and the politically insulated and foreign-dominated large-scale investments in minerals, energy and commercial farming.

Countries have been through episodes of rapid growth, but these have been ephemeral, hamstrung by the unevenness and resource dependence of that growth, contributing to the sense that growth is itself part of the broader political economy of instability in many African states (Bush and Harrison, 2014).

Source: Compiled by ECA staff.

1 UN Comtrade Database (<https://comtrade.un.org/>) and Massachusetts Institute of Technology Observatory of Economic Complexity (<https://atlas.media.mit.edu/en/>).

2 Nigeria Ministry of Budget and National Planning website (<http://www.nationalplanning.gov.ng>)

3 Natural resources constitute at least 30 per cent of Africa's total assets. The continent possesses 65 per cent of the world's remaining arable land; the second-largest tropical forest in the world; 10 per cent of the world's renewable freshwater resources; at least 30 per cent of the world's known mineral reserves; 8 per cent of the world's known natural gas reserves; and 12 per cent of oil reserves. Natural resource exports are as much as 80 per cent of total exports in some countries and the equivalent of up to 45 per cent of GDP in others.

However, development outcomes in natural resource-rich countries have generally been disappointing, marked by long-term growth failures: persistently high fiscal and current account deficits, owing to low but volatile domestic revenues and foreign exchange earnings; political instability, conflicts and even autocratic rule; and corruption and misdirected spending leading to widespread poverty, inequalities and low human development outcomes. After at least five decades of an export strategy led by primary commodities and dominated by extractives and agricultural commodities, the failure to diversify and industrialize is perhaps the starkest.

This chapter sets a conceptual framework, concentrating on tracing the links between natural resource wealth and economic, political and social outcomes (Box 1.1). It illuminates the complexity of the impacts of natural resources for setting policy directions to achieve structural transformation (Box 1.2). The literature reviewed suggests that the negative impacts of resource wealth can be overcome when a country has

a large manufacturing sector with strong link among and within sectors of the economy and when it prioritizes investment in education, skills, engineering, and research and development.

The lesson for African countries is that, to convert natural resource wealth into structural transformation (Box 1.2), governments should formulate and implement comprehensive national and regional policies to foster links and diversification. This entails:

- Realizing resource comparative advantage by overcoming infrastructure constraints through setting up infrastructure networks, including energy and transport infrastructure for bulk mineral exports.
- Densifying resource-based infrastructure by establishing ancillary and feeder infrastructure to enlarge resource-corridor catchment areas and beneficiary sectors (primarily agriculture, forestry and tourism).

BOX 1.2

What are the dynamics of structural transformation?

Structural transformation combines two sets of dynamics—structural change in the economy (that is, changes in the composition of the economy that are permanent and irreversible and that favour sectors with increasing returns) and economic transformation (that is, higher productivity through the infusion of technology and modern, competitive management practices in the production and distribution of goods and services).

The manifestations of these shifts are normally seen in the movement of labour and other resources from agriculture to manufacturing and from the informal to the formal economy and in the movement of people from rural to urban areas.

Structural transformation is about changes in socio-economic structures, investment in new technologies of production, and inclusive social change. It does not happen by chance—it is the product of deliberate, careful and inclusive long-term planning—the type that incorporates policies governing the diverse segments of Africa's natural resource sector into broader national development plans.

Source: ECA staff.

- Deepening mineral sector links to the domestic and regional economy by beneficiating these resources and creating supplier and service industries around the minerals sector, and developing them into complex industrial clusters (through upstream, horizontal and downstream links).

contributory factors to the paradox of growth without transformation included low agricultural productivity, a declining manufacturing sector, high informalization, poor links between the primary-commodity sector and other more dynamic sectors, and poor governance.

1.1

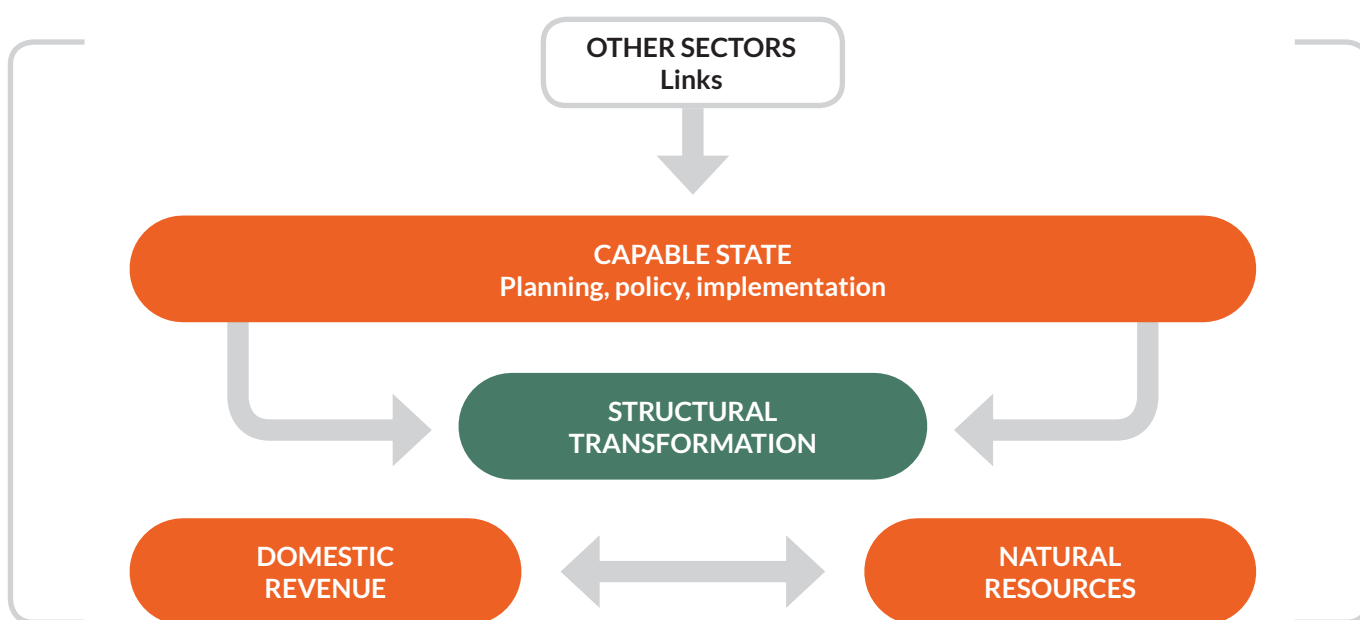
A PROPOSED ANALYTICAL FRAMEWORK

The 1980s and 1990s saw a decline in economic growth and a rise in poverty in Africa. Although growth rebounded from the early 2000s, owing to rising commodity prices—particularly for mineral and energy exports—and better macroeconomic management, this growth neither generated enough jobs nor accelerated poverty reduction. It often brought environmental degradation (even conflict) where it was driven by resource extraction and export of metals and of oil and gas. The main

The essence of *African Governance Report V* is to highlight the need for Africa's economies to use natural resource wealth as a driver to achieve the dual objectives of domestic revenue mobilization and structural transformation (Figure 1.1). The core message is that a capable state with political will (represented by strong, effective, transparent, accountable and development-oriented institutions) is needed—one to minimize harm from exploiting resources; to maximize the positive development outcomes; and to foster structural transformation, using tools to generate revenue and manage expenditure and industrial policies to tighten cross-sectoral links between the natural-resources sector and other more dynamic sectors.

Structural change and economic transformation are essential to economic development and require

FIGURE 1.1 The resource governance framework for domestic revenue mobilization and structural transformation



Source: ECA staff.

deliberate policies and a political economy devoted to expanding and upgrading the industrial sector, particularly manufacturing, which is vital for sustained growth (Oqubay, 2015) and for catch up. African governments that can harness these dynamics are well placed to foster economies that are inclusive, competitive and capable of generating jobs for their growing youth populations and that have the revenue base to invest in skills, public services and infrastructure.

For Africa, structural change from a position of dependence on resource exports demands diversification and establishment of linkages, to be facilitated by far-sighted and cogent state policies, which are premised on a holistic approach. A central plank of governments' holistic approach to spurring structural transformation is through the adoption and deployment of well-crafted and properly calibrated industrial policies, which in the case of majority African countries (particularly natural resources-rich ones), would involve leveraging commodity-based industrialization as a stepping stone to diversifying over the long-term and building competitive advantages (ECA & AU, 2014).

A structurally transforming industrial policy is both a technocratic exercise and a dynamic political economy process. Whether well-executed policies succeed depends on state–society relations—the

nature of institutions—and these relations form the backdrop to the capable state. Some of the fundamental goals of the developmental state are to purposefully manage natural resources, stabilize then maximize revenues, and foster diversification and closer cross-sectoral links.

Success will lead to deep, sustainable and inclusive social development, higher incomes per capita and human development indicators, a skilled society with little involuntary unemployment, and highly urbanized and non-hierarchical social systems, including gender equality. To get there, Africa's structural transformation demands good governance—of natural resources especially—and sound development planning.

Good governance in this field requires institutions—formal and informal—to have the mandate, capacity and supportive ecosystem to formulate, execute and enforce the policies managing the natural resource endowments for the public good. Institutions must ensure that decision-making is transparent and participatory, and must be held accountable for their actions. But what is governance, and what are the features of good governance?

Governance in this report is understood to mean the purposeful processes, rules, policies, norms and mechanisms that shape the making and execution of decisions. It also involves how authority and

BOX 1.3

Transparency versus accountability

Transparency enhances disclosure of information, rules, processes and actions of governments, organizations, companies or individuals. Accountability is a double-edged principle: on the one hand, there is responsibility held by public officials, extractive companies and other actors who perform public duties or affect the public good; on the other, there are sanctions when obligations are not met or responsibilities are neglected. In the extractive industry the ability of the state to use mineral rents for economic growth and transformation depends heavily on the presence of strong accountability mechanisms.

Source: ECA staff.

power are exercised. Good governance includes such principles as transparency, accountability (Box 1.3), participation and management of diversity. The outcomes of good economic governance include robust economic growth, high incomes per capita and a competitive and diversified economy. The outcomes of good political governance include political stability, peace and security, the rule of law, participatory governance and—arguably—democratic practices.

1.2

DEVELOPMENT OUTCOMES

The quality of governance has a decisive influence on economic, social and political development and, for natural resource governance, determines whether resource wealth becomes a blessing or a curse for a country. Bad resource governance, as seen in malfunctioning institutions, is more likely to have harmful effects on economic performance by curtailing the incentives and opportunities to invest and innovate (North, 1990; Schleifer and Vishny, 1993). Natural resource rents, when poorly governed, may also be more likely to induce autocratic rule—and in worse cases may lead to conflict—by weakening state structures, fostering rent seeking and undermining accountability (Collier and Hoeffler, 2003; Ross, 2001).⁴ In contrast, good governance (usually associated with democracy) arguably enhances economic growth and sustainable development (Kararach, 2014). By implication, poor governance (including autocracy) undermines economic growth and sustainability. Good governance is therefore a necessary ingredient not only for economic growth but also for political stability and sustainable long-term development.

The tendency for natural resource wealth, if poorly governed, to undermine economic growth and be politically destabilizing arises in part from three

characteristics unique to the natural resource sector, especially extractives.

The first is its enclave nature—the fact that the generation of natural resource wealth tends to have few opportunities for backward and forward links (defined in Box 3.4 in Chapter 3) that foster innovation and learning by doing, which are essential for long-term growth and for building resilient economic institutions. During exploitation and production, extractive industries employ a few highly skilled, well-paid workers and import most of their capital-intensive inputs. There is also a political dimension to the enclave nature, partly because extraction is often externally financed and owned, and does not require local taxes or capital, nor public debt. This removes the process of extraction from democratic processes of accountability and meaningful local community engagement. These factors generate political and economic risks and are tied to poor development outcomes.

The second characteristic is that natural resource wealth is finite—non-renewable—except the so-called dispersed resources—forest, water and land resources. Natural resources are income-generating assets.

These two factors influence a country's development through several channels, including incentives affecting economic and social development, political institutions and environmental protection. Without efforts to convert natural resource wealth into other assets, a country will simply eat up its assets, leaving it poorer in the long run.

The third characteristic is that natural resource exports are prone to booms and busts. The impacts of these sudden price changes can be severe. (The analysis of these impacts have dominated the literature on how natural resources affect development outcomes.) Managing these cycles presents the greatest economic governance challenge to many African governments.

⁴ Rent seeking is the use of political mechanisms by individuals, private companies and politicians try to capture economic rents for themselves at the expense of society, thereby weakening institutions, misallocating resources and—far too often—triggering conflict.

Natural resource wealth thus requires targeted government policies directed at sustainable development.

1.2.1 Concentration, control and diversity of natural resources

Natural resources represent wealth (assets) when left untouched; commodities when extracted for the market; or raw materials when extracted for beneficiation or as an input to secondary production. According to the World Bank's Wealth of Nations Database, more resource rents globally are generated in richer countries—34 per cent in OECD and high-income non-OECD countries and 36 per cent in upper-middle-income countries—than in poorer ones—about 30 per cent in low-income and lower-middle-income countries.⁵ Despite this distribution, OECD countries are not associated with the resource curse—attributable to their strong governance and more diversified economies.

Except for a few minerals, Africa does not have a controlling share of world output in minerals and hydrocarbons, even if in at least 10 African countries minerals and hydrocarbons constitute more than 90 per cent of exports.⁶ Highly dependent price takers, Africa's resource-rich countries are very vulnerable to fluctuations in international demand and prices.

Production of minerals and hydrocarbons is dominated by global companies, and a few of them control the production of strategic minerals worldwide. For example, three companies control 78 per cent of palladium production, three companies control about 70 per cent of platinum production and three companies control about 60 per cent of titanium output.⁷ These minerals are subject to geopolitical influence as well as oligopolistic pricing.

Some precious, industrial and metallic minerals are regionally concentrated in Africa. South Africa controls nearly 80 per cent of platinum production, 38 per cent of palladium output and 39 per cent of chrome production; cobalt production is concentrated in two countries, Democratic Republic of Congo and Zambia. These three countries should have a major influence on the market conditions for these minerals through regional cooperation—but they do not.

Deposits of minerals that are scarce, strategic and highly desired for new technologies and manufacturing interests outside Africa, such as palladium and beryllium for cell phones or titanium for aircraft, are found in only a few countries—none of which uses them for domestic production. Of all global regions, Africa consumes the least of its hydrocarbons and minerals domestically: 25 per cent of its crude oil, 50 per cent of its natural gas and hardly any of its strategic minerals (such as cobalt, palladium or uranium). This is a telling reflection of the weaknesses of its manufacturing and the lack of links to other sectors.⁸ The natural resources that have the most direct impact on livelihoods of many Africans—water, land and forest resources—have problems of depletion and scarcity rather than abundance.

1.2.2 Economic impacts

Natural resource wealth affects the economy through its contribution to economic growth, taxes and export revenues, and as inputs for further production. The size of the impact rests on such factors as the degree of concentration in primary commodity exports and exposure to world markets, volatility in those markets, the nature of the commodity and the quality of institutions mediating these impacts.

⁵ According to the same source, Africa's natural resource rents increased six-fold between 2000 and 2008, with oil rents about two-thirds of the increase.

⁶ In 2005 the exceptions included coltan (over 60 per cent), cobalt (57 per cent), diamonds (53 per cent) and manganese (39 per cent).

⁷ World Bank Wealth of Nations Database.

⁸ Data on Africa's non-metallic minerals, which have a greater potential for domestic consumption and industrialization, such as clay, crushed rock, building stones, potash and industrial carbonates, are scarce.

TABLE 1.1 Export Dependence for African Countries, 2016

Export Product Concentration Index (0, less concentrated, to 1, more concentrated)		Export Product Diversification Index (0, more diversified, to 1, less diversified)
EAST AFRICA		
0.44	Burundi	0.83
0.68	Comoros	0.80
0.51	Dem. Rep. of the Congo	0.83
0.22	Djibouti	0.69
0.40	Eritrea	0.80
0.30	Ethiopia	0.82
0.20	Kenya	0.64
0.30	Madagascar	0.81
0.36	Mauritania	0.83
0.33	Rwanda	0.78
0.51	Seychelles	0.82
0.45	Somalia	0.75
0.32	Tanzania	0.80
0.17	Uganda	0.72
WEST AFRICA		
0.31	Benin	0.77
0.75	Burkina Faso	0.87
0.32	Cabo Verde	0.77
0.38	Côte d'Ivoire	0.74
0.35	Gambia	0.80
0.43	Ghana	0.80
0.45	Guinea	0.85
0.88	Guinea-Bissau	0.76
0.33	Liberia	0.76
0.74	Mali	0.90
0.30	Niger	0.81
0.73	Nigeria	0.84
0.22	Senegal	0.76
0.66	Sierra Leone	0.87
0.20	Togo	0.69
SOUTH AFRICA		
0.93	Angola	0.48
0.88	Botswana	0.93

Export Product Concentration Index (0, less concentrated, to 1, more concentrated)		Export Product Diversification Index (0, more diversified, to 1, less diversified)
SOUTH AFRICA		
0.28	Lesotho	0.83
0.41	Malawi	0.81
0.20	Mauritius	0.68
0.27	Mozambique	0.80
0.27	Namibia	0.81
0.12	South Africa	0.51
0.23	Swaziland	0.71
0.66	Zambia	0.83
0.37	Zimbabwe	0.85
NORTH AFRICA		
0.49	Algeria	0.82
0.15	Egypt	0.58
0.54	Libya	0.83
0.17	Morocco	0.68
0.65	Sudan	0.86
0.13	Tunisia	0.52
CENTRAL AFRICA		
0.41	Cameroon	0.80
0.46	Central African Republic	0.83
0.74	Chad	0.85
0.67	Congo Rep.	0.86
0.68	Equatorial Guinea	0.92
0.76	Gabon	0.86
0.59	São Tomé and Príncipe	0.68

Source: United Nations Conference on Trade and Development Data Center (<http://unctadstat.unctad.org/wds/TableViewer/tableView.aspx>)

Concentration of African export

Table 1.1 presents indices of the concentration (left column) and diversification (right column) of African countries' exports. On export concentration, industrialized countries have values closer to zero. Of 53 African countries with data, have a value above 0.42, and almost a quarter have a value above 0.60. Angola,

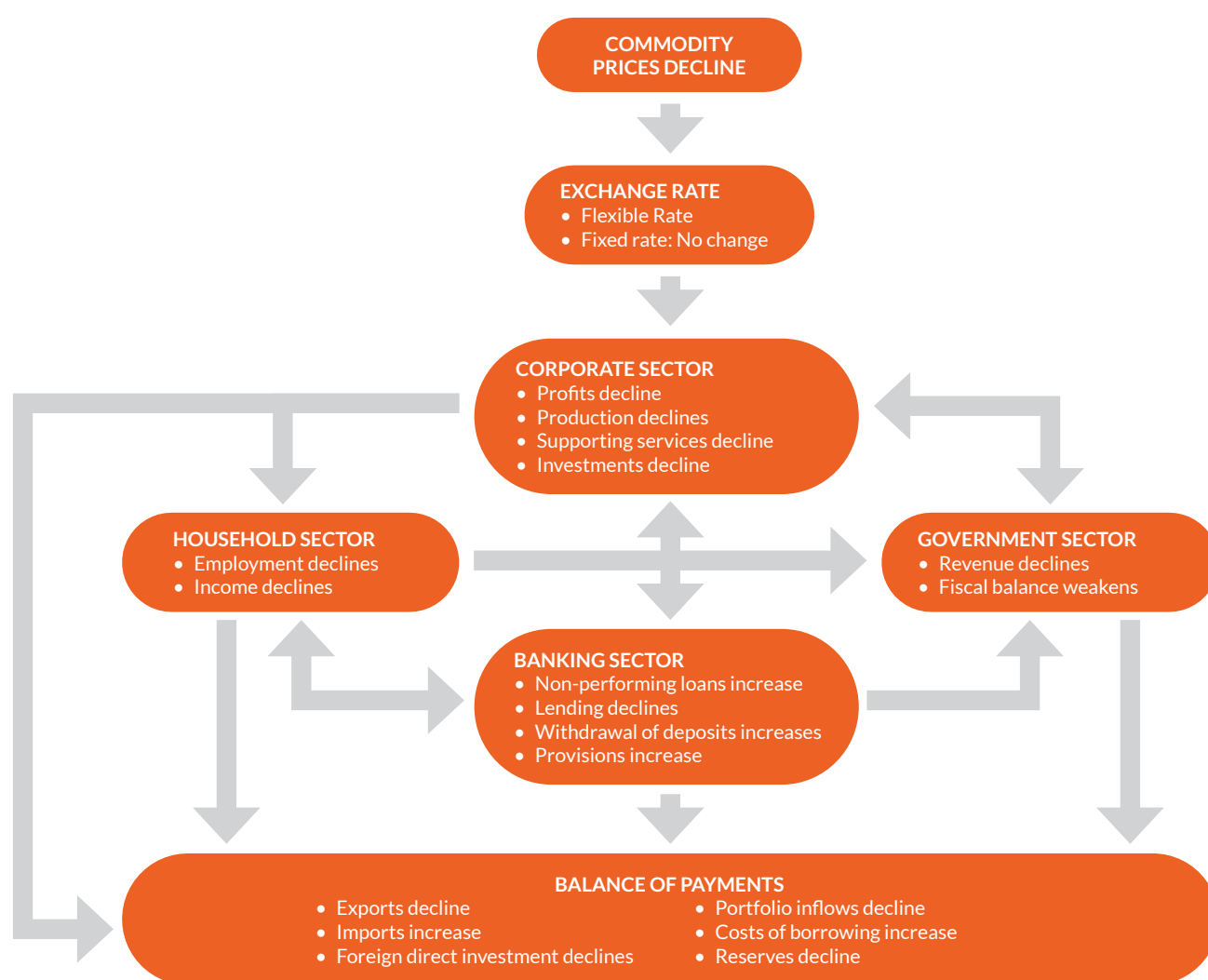
Botswana, Chad and Guinea-Bissau have a value of 0.70 or higher. These figures indicate dependence on a narrow range of products such as hydrocarbons in Angola, Equatorial Guinea, Libya and Nigeria. On export diversification the higher the index value, the less diverse the export basket is. All African countries, except Angola, have a value above 0.50 or higher, and more than half have a value of 0.80 or higher.

This dependence generates risks, including exposure of resource-rich countries to price fluctuations in international markets, which increases macroeconomic volatility and ultimately hurts socio-economic performance. African countries' concentration in hard minerals and crude oil, without adding value, offers little scope for manufacturing.

The impact on the broader economy of falling export prices in a resource-dependent economy is traced in Figure 1.2. The transmission begins with the exchange rate. Declining prices lead to declining foreign exchange inflows, tending to cause pressure for the local currency to

depreciate. Depending on the exchange rate regime, early consequences can be an adjustment through devaluation (with a flexible exchange rate regime), foreign exchange rationing, or depletion of reserves. Declining commodity prices also lead to lower corporate output, profits and investment, with impacts on households; to high fiscal deficits and debt; to current account deficits; and often to macroeconomic instability. The immediate fiscal effects of export price declines are reduced government revenue and spending and, without tight fiscal policies, pressure on domestic prices (inflation), as well as the fiscal space, undermining government spending.

FIGURE 1.2 Transmission channels of falling commodity prices



Source: Adapted from Christensen (2016).

FIGURE 1.3 Transmission channels of falling commodity prices

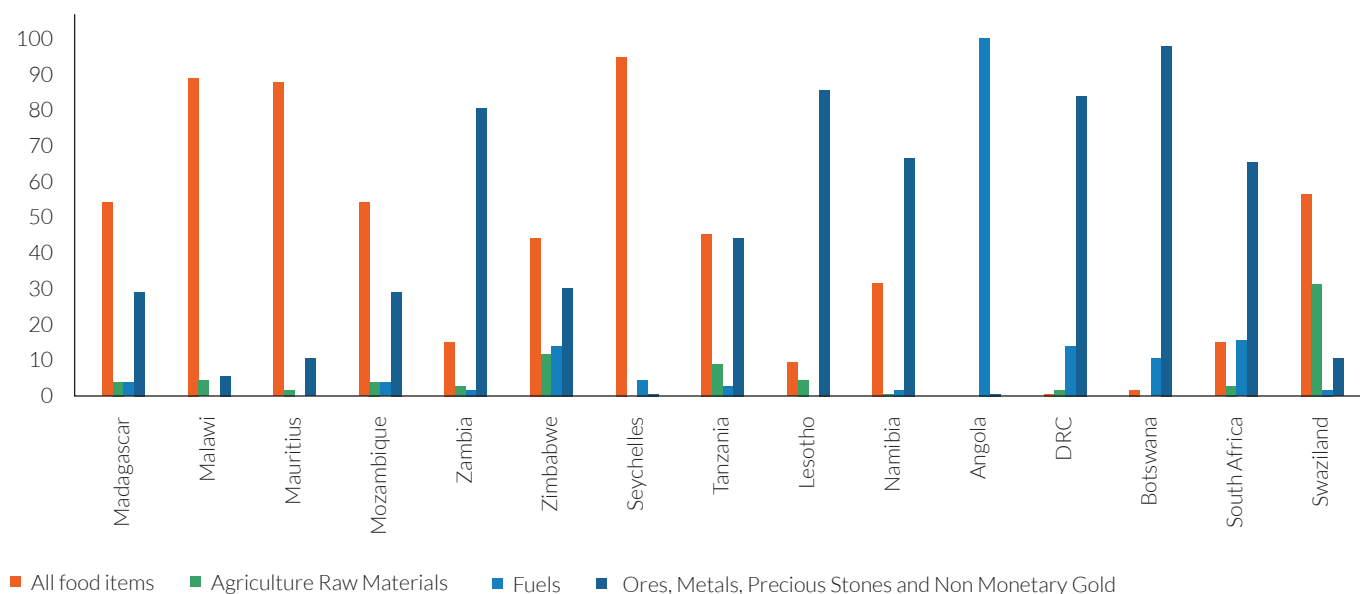
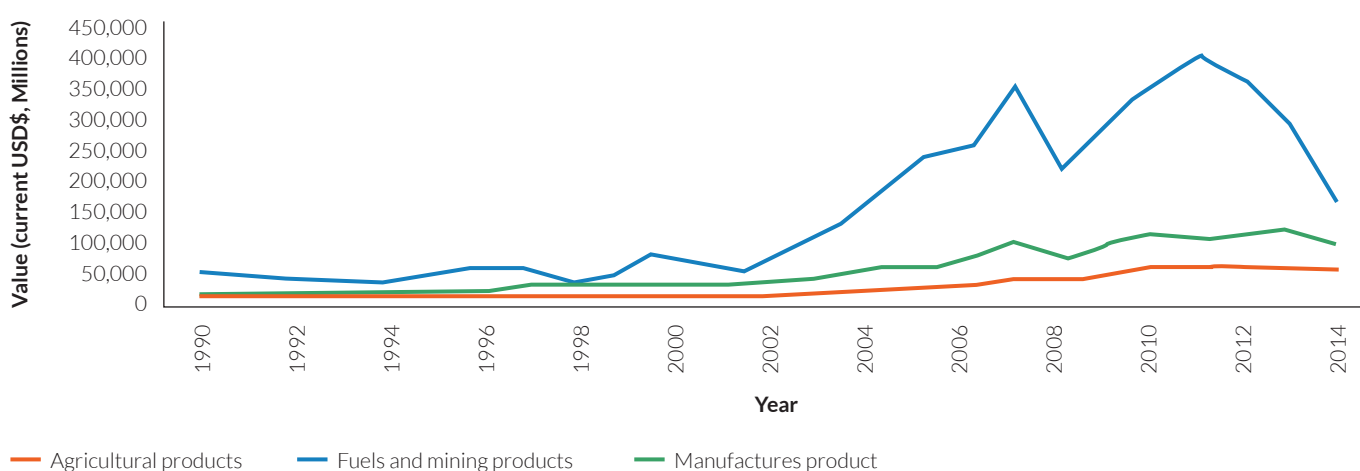


FIGURE 1.4 Value of Africa's merchandise exports, by sector, 1990–2014 (current \$)



Export concentration is also reflected in the contribution of commodity exports to export revenues. Figure 1.3 shows the shares of categories of commodity exports in total merchandise exports for countries in the Southern African Development Community, which largely typifies the structure across the continent. Angola stands out as the most commodity dependent—in its case on fuels—followed by Botswana (ores) and Seychelles, Malawi and Mauritius (agricultural commodities).

The composition of exports Africa-wide is dominated by fuels and minerals, with very little contribution from manufacturing (Figure 1.4). In 2016 the top two export commodities made up 47 per cent of Côte d'Ivoire's merchandise exports (cocoa and petroleum), 47 per cent of Cameroon's (crude petroleum and cocoa beans), 92 per cent of Nigeria's (crude petroleum and gas) and nearly 100 per cent of Angola's.

Volume and volatility of natural resources—prices and revenues

Commodity exports also contribute directly to government revenue, mainly through fees, taxes, royalties and corporate income tax, but are modest, except in Botswana and oil-exporting countries. In Botswana the mineral share of government revenue averaged 50.9 per cent in 1985–1994, 52 per cent in 1995–2004 and 39.9 per cent in 2005–2014. And in Nigeria, an oil exporter, the export of hydrocarbons averaged 70 per cent of government revenue over the past two decades. By contrast, in Zambia the mining sector contributed less than 0.1 per cent of GDP to government revenue in 2000–2007, while accounting for about 6.2 per cent of GDP.

Except for Botswana (among non-oil exporters), tax revenue as a share of GDP is far lower than exports, at less than 20 per cent in most resource-rich African countries, compared with more than 40 per cent in Norway and an average of 35 per cent in OECD countries.

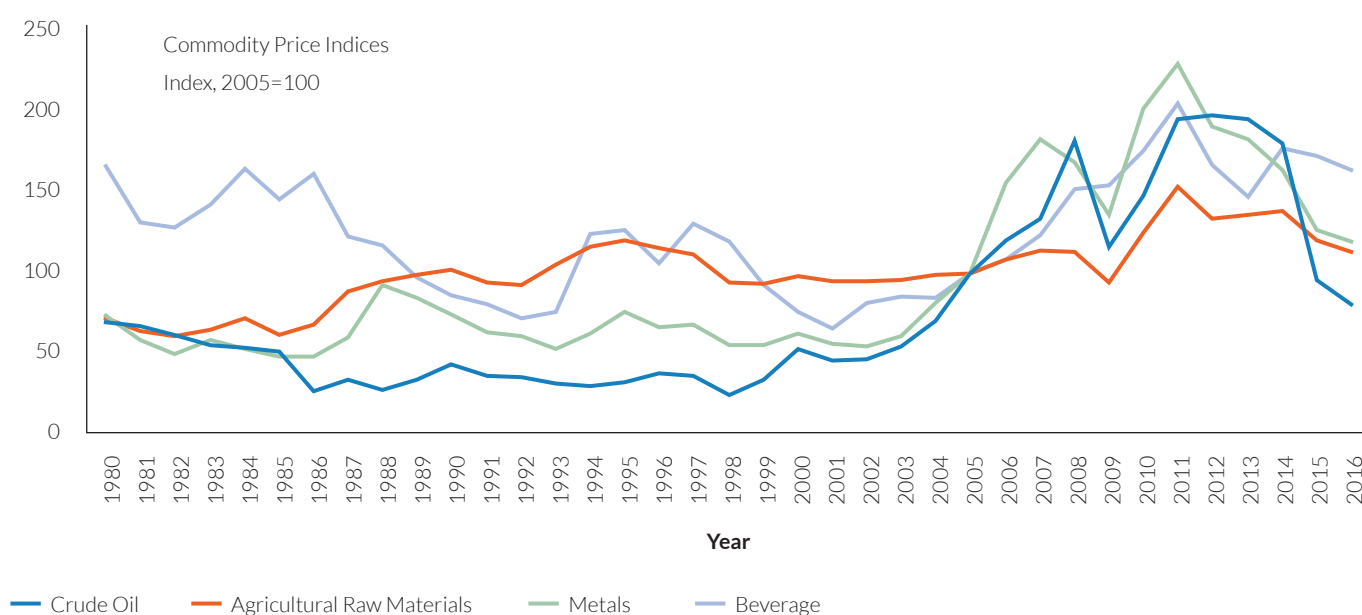
Figure 1.5 indicates the decline in prices of all commodities (except agricultural raw materials) from 1982 to roughly 2002 and the emergence

of the commodity super-cycle beginning in about 2002–2003 and ending in around 2011. It also indicates the volatility of crude oil and metal prices relative to agricultural commodities. Given that nearly 70 per cent of Africa's exports by value are crude oil, natural gas and metals, these price swings hurt the continent's economies greatly, oil exporters and importers alike.

Revenue volatility stems from volatility in extraction rates (production volumes generally peak in the earlier years of production then rapidly decline), from volatility in the timing of payments and from fluctuations in the value of the resource. Another source may also be the revenue-sharing formula between governments and companies, as companies tend to benefit from large incentives such as tax breaks in a project's early stages. And because producing countries must generally accept commodity prices set on the global market, they are vulnerable to exogenous price and production shocks, which can trigger distributional issues between governments and resource extraction and production companies (Barma et al., 2012).

Price volatility affects the terms of trade (hence countries' purchasing power), owing to a circular

FIGURE 1.5 Commodity price indices, 1980–2016 (2005 = 100)



Source: Yearly averages computed from the International Monetary Fund Monthly Commodity Price Database (www.imf.org/external/np/res/commod/index.aspx).

decline in, and greater volatility of, commodity prices against manufactures (see just below). These tendencies cause trade gains to be distributed to primary products, leading to slow economic and government-revenue growth. Primary commodity dependence is therefore linked to low income—a concern that motivated the very creation of the United Nations Conference on Trade and Development (UNCTAD)—and indicates the need for industrialization and, some argue, tariff protection. Countries producing and exporting primary commodities also face the “price scissors” problem—a widening gap between industrial and agricultural prices.⁹

Countries may also lose revenue through illicit financial flows—when extractive companies and powerful elites conceal their wealth in jurisdictions that offer secrecy to minimize tax obligations, facilitate legitimate transactions or conceal, for example, proceeds from corruption or the sale of banned substances. The Economic Commission for Africa (ECA, 2015) estimates that the annual flow of illicit financial flows from Africa exceeds \$50 billion.¹⁰ Mechanisms include transfer mispricing (such as under-invoicing of exports and over-invoicing of imports) and smuggling of precious minerals and stones.

The volume and stability of revenues from natural resources are also directly affected by revenue governance frameworks, including legal and regulatory frameworks that guide exploration, licensing, concessions, sustainable development and management of natural resources, including collection and distribution of revenues. These frameworks—and their successes—vary hugely across countries. They aim to achieve multiple objectives, including security of tenure, revenue sharing, and local content and participation in production. Common drawbacks are poor implementation and monitoring and weak public participation. (See sections 2.1.2, 2.3.5, and 2.3.6

in Chapter 2, sections 3.2 and 3.4 in Chapter 3, and sections 5.2, 5.4, and 5.6 in Chapter 5 for a detailed discussion.

Economic growth

Natural resources yield rents, or extraordinary profits, from their production (Barma et al., 2012) and should thus be a huge source of development financing. But the rise in exports and ultimately resource rents (Barma et al., 2012) has not been matched by gains in human development and has not translated proportionally to wealth in most countries.

Some countries have succeeded in translating natural resources into positively transformative outcomes, others have not: Botswana’s and Chile’s natural resource-led development trajectory has led to prosperity; Democratic Republic of Congo has worrying symptoms of the resource curse, with extraction marked by decades of poor governance, conflict and impoverishment. Nigeria is somewhere in the middle, with a suboptimal equilibrium, owing to poor results from natural resource extraction (Barma et al., 2012).

Although the continent’s growth trajectory has closely followed global price booms and busts, since 1980 growth in GDP per capita has been paltry, falling below zero in many countries in some years in the 1980s and well into the 1990s (Figure 1.6), reflecting declining commodity prices and reduced public spending under structural adjustment programmes (see Section 2.1 in Chapter 2).

The Asian financial crisis of the late 1990s and the global financial crisis of a decade ago further depressed growth. Although growth in GDP per capita recovered after the turn of the century as the commodity super-cycle unfolded, most natural resource-rich countries have seen their aggregate income growth barely exceed

⁹ This refers to an economic phenomenon when the overall valuation from a certain group’s production for sale outside the group drops below the valuation of the group’s demand for goods produced outside the group after a period of reasonable equilibrium. This was observed in the Great Depression when prices of agricultural commodities in Eastern Europe fell sharply while those of manufacturing goods remained fairly stable.

¹⁰ All references to dollars are to US dollars, unless otherwise noted.

population growth—that is, growth in GDP per capita has been minimal (a few countries aside, such as Botswana). (Distributional impacts feeding into inequality are also concerns, as discussed in the next section.)

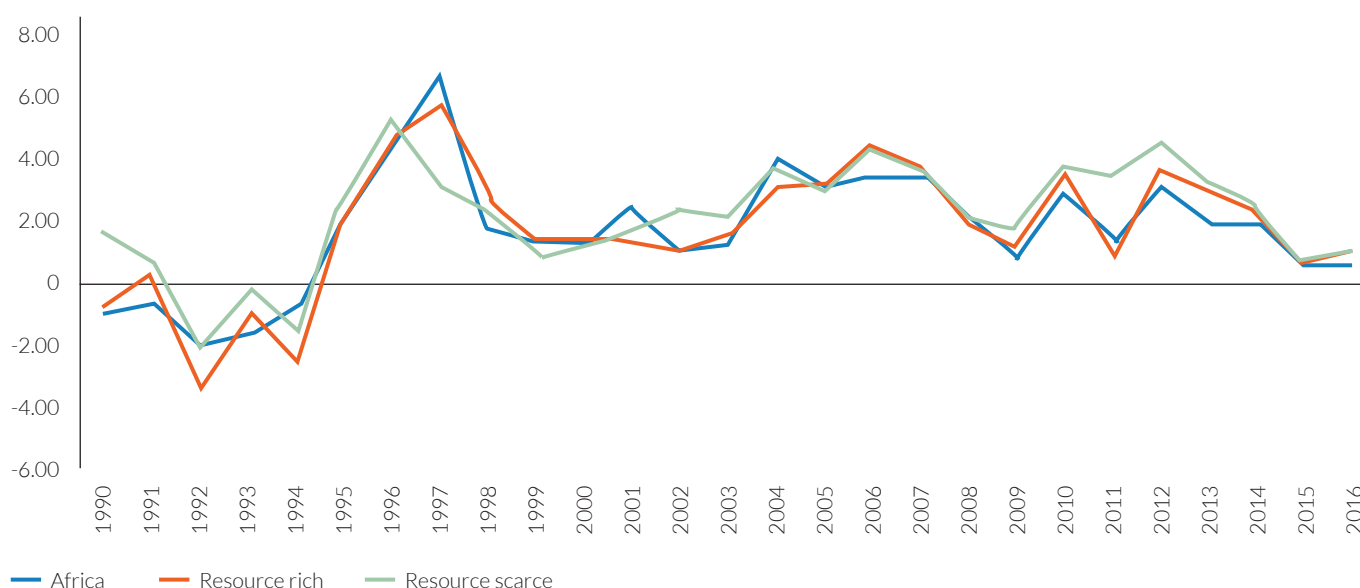
African economies gained immensely from the commodity super-cycle, with prices peaking in 2011–2012 (UNCTAD, 2015). In 2000–2011 UNCTAD's broad index of commodity prices tripled while price indices of minerals, ores and metals, and crude petroleum nearly quadrupled.¹¹ Real GDP growth for African countries saw an upturn from early in this period but slowed after 2014. Although the continent's real GDP growth picked up from 2016 onwards, overall, African countries have been unable to sustain growth over sufficiently long spells, with resource-rich countries often doing worse than resource-scarce economies.

Several authors have claimed that a country with a large endowment of natural resources will naturally bear a winner's curse, as in game theory. In the long run its economy will perform worse

than countries with a smaller resource endowment (see, for example, Auty, 1993; Auty and Gelb, 2001; Sachs and Warner, 1995). Figure 1.6 appears to bear this out—for Africa at least. Natural resource abundance may also affect longer-term growth, on the theory that it undermines state incentives to tax save and invest.

There may also be a capital-depletion effect, which applies particularly to minerals and petroleum resources. Because these resources are non-renewable, consumption of revenues from their sale should be viewed as consumption of capital, not of income: if all revenues are consumed in a given period, the value of capital declines, and if future revenues are mortgaged for current consumption (through debt), capital depletes even faster, unless replenished in other forms, such as human capital. Pressure by populations on governments to spend on welfare makes it hard for states to convert natural resource wealth into other assets for future growth, such as financial assets. As noted above, capital may also be depleted through illicit financial flows.

FIGURE 1.6 Real GDP per capita growth for resource-rich and resource-scarce African countries, 1990–2016 (per cent)



Source: Yearly averages computed from the International Monetary Fund Monthly Commodity Price Database (www.imf.org/external/np/res/commod/index.aspx).

11 United Nations Conference on Trade and Development Data Center (<http://unctadstat.unctad.org/wds/ReportFolders/reportFolders.aspx>).

Another impact—the resource-pull effect—is often felt when, owing to a boom, domestic revenue shifts to the natural resource sector, raising prices in that sector (for example, for labour and construction generally) and undermining productive sectors such as manufacturing or commercial agriculture.

The upshot is a preference for the natural resource sector and the non-traded goods sectors at the expense of traditional export sectors (agriculture in developing countries and manufacturing in more developed economies). These shifts can have long-lasting, even irreversible, effects on competitiveness and thus long-term growth, especially if the non-preferred sectors are also sources of innovation and learning by doing. When natural resource prices fall eventually, these other sectors usually find it difficult to recover, undermining prospects for manufacturing and economic diversification (Murshed, 2004).

Efforts to diversify the economy may also be fettered by such factors as poor infrastructure, especially in energy and transport; low productivity of the leading economic sectors; and lack of or poor implementation of industrial policy, including steps to foster links and invest in modern skills. Very few African countries have been successful with industrial policy, notably Ethiopia and Mauritius—both poor in minerals and hydrocarbons—and to some extent South Africa.

Jobs

The contribution of the extractive sector to employment is very low, owing to its capital intensity. Two examples: in 2007–2016 direct employment in South Africa’s mining industry as a share of non-agricultural formal employment averaged just 5.9 per cent, and in 2014 Zambia’s mining sector employed a mere 1.4 per cent of the total labour force. For most African countries the largest source of work in the extractive sector is artisanal and small-scale mining. Agriculture is the single biggest provider of jobs in Africa—at,

for example, over 30 per cent in Ghana, 38 per cent in Nigeria, nearly 50 per cent in Zambia and about 64 per cent in Malawi (Malawi NSO, 2014).

1.2.3 Poverty and social development impacts

Even with decades of exports of natural resources—often at favourable prices—in many resource-rich African countries poverty is still high and human development outcomes are still poor. In 2014 the \$2 a day poverty rate was more than 53 per cent in Nigeria and more than 46 per cent in Tanzania. Nigeria’s high poverty rate is attributable partly to a decline in GDP growth, although the extreme poverty rate has exceeded 40 per cent for over two decades. Uganda’s extreme poverty rate is above 30 per cent and Egypt’s is about 28 per cent.

Natural resources have direct and indirect impacts on social development. Communities that rely on natural resources for their livelihoods can see these livelihoods¹² directly threatened by large extractive activities, including pollution and destruction of arable land. An example of positive indirect impacts is the social benefits derived from government revenues (earned from natural resources) being invested in health, education, sanitation, social protection and rural development or in physical capital that generates jobs.

Resource-rich countries have poor human development outcomes for several reasons. First is the impact of price volatility and uncertainty on public spending and consequently on distributional outcomes, because few African countries can smooth spending over price cycles. Second, as noted above, revenues from extractive industries are greatly affected by price cycles.

Third is a shift of resources between sectors. If there is loss of competitiveness in manufacturing (or other non-resource tradeable sector)—taken to be the leading source of human capital

¹² For example, communities that rely on food from farmlands, fisheries, forests and wildlife; medicines from rich biological diversity; income from labour and services rendered to extractive industries; and earnings from the production and export market.

accumulation—the growth path of the economy under free trade will be lower than those of resource-poor countries (Sachs and Warner, 1999). A decline in the human capital stock may also arise from the “easy riches lead to sloth” idea, in which booms tend to imbue people with a false sense of security and lead governments to lose sight of the need to invest in education and a diversified and skilled workforce (in order to support other economic sectors), to put in place growth-friendly policies and to build efficient bureaucracies and high-quality institutions (Sachs and Warner, 1999). The share of national income spent on education in natural resource-rich countries has tended to decline, as have their secondary school enrolment rates. Nigeria is a case a point.

Poor social performance

Despite its huge natural resource endowments, Africa dominates the low end of the Human Development Index, accounting for 36 of the 41 countries with low human development status (UNDP, 2016). Only Algeria, Libya, Mauritius, Seychelles and Tunisia have high human development status. Botswana, Cabo Verde, Republic of Congo, Egypt, Equatorial Guinea,

Gabon, Ghana, Kenya Morocco, Namibia, Sao Tome and Principe, and Zambia are classified as medium human development countries. Income inequality is relatively high in resource-rich African countries (Gini coefficient of 42.2), in resource-scarce countries (42.8) as well in land-locked countries (43.3) (Table 1.2).

Nkurunziza et al. (2017) also found a negative and complex association between commodity dependence and human development, particularly in developing countries and countries with low human development. Conflict is another too-prevalent outcome of the failure to translate resource riches into quality-of-life gains and the continuing inequalities caused by unequal distribution of returns (Collier and Sambanis, 2005; Fearon and Laitin, 2003; Kaldor et al., 2007; Weinstein, 2007).

Inequality

Inequality is also a source of great concern. It seems more entrenched in resource-rich African countries than in resource-poor ones, and new finds are associated with higher income inequality. The enclave nature of, especially, hydrocarbons and mining, with few forward and backward links to the economy, limits spillovers. Equally, there is

TABLE 1.2 Resource abundance and social performance, 2016

Characteristic	Human Development Index value (0, lower human development, to 1, higher human development)	Inequality (Gini coefficient: 0, perfect equality, to 100, perfect inequality)
Resource-rich African countries	0.52	42.2
Resource-scarce African countries	0.55	42.8
Land locked African countries	0.47	43.3
Resource-rich land-locked African countries	0.47	41.7
Resource-scarce land-locked African countries	0.48	45.5
Coastal African countries	0.56	41.9
Resource-rich coastal African countries	0.54	42.2
Resource-scarce coastal African countries	0.57	41.5
Africa	0.53	42.4

Source: UNDP (2016); United Nations University World Institute for Development Economics Research database; World Bank World Development Indicators database (<http://databank.worldbank.org/wdi>).

a considerable risk that public spending during a resource boom may exacerbate inequality by, for example, concentrating expenditure in the formal sector in towns and cities, skewing distribution by excluding rural households or prioritizing the interests of the elite. Because of these political economy tendencies, the wider population tends to identify the production and export of natural resources with the interests of the rich.

Spatial and social inequality is particularly important given the informality of African natural resources, where most workers earn lower and unstable incomes and have far less access (if any) to basic protection and services than workers in the formal sector do (Benería and Floro, 2005; UNRISD, 2010; see also Box 4.4 in Chapter 4). Informality has hefty social consequences, especially for those already poor. Poverty becomes entrenched because informal businesses lack the potential for growth, trapping employees in menial jobs and poor working conditions. However, the informal jobs in natural resources provide an income for many younger people, enabling them to escape extreme poverty and earn an income beyond mere survival (García-Bolivar, 2006).

Development in natural resources also has onerous gender-differentiated social impacts, stemming from distinct economic and other roles for women and men. Women's lives are dominated by their reproductive role and men's by their productive role, with conflict between them. There is little participation of women in mining as biases, and cultural taboos in artisanal and small-scale mining exclude women from digging, leaving them with a greater presence in processing, services and trading. Men tend to have bigger operations and deal in non-perishable items, and few women are employers who hire others.

Women also tend to make up the greatest portion of the informal natural resource sector—as artisanal and small-scale mining operators, landless farmers and participants in illegal resource trading—and often end up in the most erratic and corrupt segments of the sector (UNRISD, 2010). The majority of these women are home-based workers (such as dependent subcontract workers, independent own-account producers and unpaid workers in family businesses) and street vendors (Chen, 2001).

The link between employment in the informal economy and poverty is stronger for women than for men (Carr and Chen, 2001). Men tend to be overrepresented in the top segments of any informal sector (including natural resources), women in the bottom areas (Carr and Chen, 2001; UNRISD, 2010). Household decision-making powers and gender biases continue to propagate such gender inequities.

Children work in many parts of the world, but the problem is often more acute in African countries. They work as day labourers, cleaners, construction workers, vendors and domestic workers; in seasonal activities; in small workshops; and often in hazardous and exploitative conditions (UNRISD, 2010). It is common for children to work as artisan and illegal miners, farm labourers and charcoal burners. These children are very vulnerable to exploitation: often they are not allowed to take breaks or are required to work long hours, and many lack access to education, which destroys their futures.

1.2.4 Some political and institutional impacts of natural resource abundance in Africa

Africa's political landscape is diverse. Some countries are more politically stable than others, for example. The Mo Ibrahim Index on African Governance has lauded Botswana for its consistently high governance score, with positive outcomes for domestic revenue mobilization and usage from natural resources. In contrast, Egypt and Uganda have had several periods of military rule and insurrection. Democratic Republic of Congo, Côte d'Ivoire, Liberia and Sierra Leone have had civil wars, with heads of government seeking—sometimes successfully—to extend their periods in office.

These disparate trajectories and states of democratic practice form the social and institutional backdrop for the governance of natural resources, including transparency, accountability, participation and inclusive development, as well as a balance between formal and informal public institutions.

Countries are more likely to suffer from the resource curse if they have weak institutions. These harm economic performance by reducing incentives and opportunities to invest and innovate, ultimately explained by the rentier state theory, which holds that mineral rents reduce the government's need to levy domestic taxes, rendering leaders less accountable to citizens and more prone to patronage politics, rent seeking and corruption. The high dependence on external rents produced by a few actors undermines the very foundations of governance and weakens domestic revenue mobilization by undercutting the base for personal and corporate taxation.

Countries are more likely to suffer from the resource curse if they have weak institutions.

Poor governance essentially stems from the ease with which the political and economic elite capture rents and use them for unpopular or illegal objectives, including self-enrichment. In some instances the executive discretion enabled by natural resource rents leads to less political liberalization (democratic transition) and a greater chance of democratic breakdown (failure of democratic consolidation).

Some studies find a robust, negative correlation between the presence of a sizable natural resource sector and democracy in Africa (Collier and Goderis, 2007; Ross, 2001). Their authors argue that resource abundance has not only been an important determinant of democratic transition but also a partial determinant of the success of democratic consolidation in some African countries. They point to the fact that the 1990s' immediate post-Cold War democratic reforms were relatively successful only in resource-poor countries such as Benin, Mali and Madagascar, compared to resource-rich countries such as Cameroon, Gabon, Togo and Zambia, which during the same period, witnessed serious

democratic challenges, including election rigging and opposition parties' boycotts, while some others (Algeria, Democratic Republic of Congo and Sierra Leone), sank into violent conflict or were labelled as autocratic regimes (in the case of Nigeria and Tunisia). The authors argue that resource-rich countries can become democratic if they introduce strong mechanisms of vertical and horizontal accountability.

Such authors argue that abundance of natural resources increases competition for control of the state, which is linked to political violence and conflicts, and the use of resource rents by ruling parties to maintain their hold on political power. Resource-poor countries have less competition for such control, which favours the building of democratic institutions. In authoritarian political systems resource abundance allows incumbent politicians to maintain support and consolidate their hold on political power, according to these authors. They also maintain that in natural resource-rich countries politics is dominated by distribution of resource rents, not ideology. In political systems with multiple parties, incumbents make offers on using these rents based on the need to build minimum coalitions to maintain power. In authoritarian political systems politicians use resource rents directly to buy favours, making it difficult for the democratic transition to take hold.

Conflicts may also occur between the ruling elite, extractive companies and communities if rights are contested, especially to common-property lands from which the resource is to be extracted, if the extraction threatens local communities' livelihoods. The protracted conflict in the oil-rich Niger Delta of Nigeria has had features of collusion between corporate (particularly oil multinational corporations) and governing elite interests against local communities, particularly during the country's long-years of military rule (see Ikome, 2005).

In extreme cases—when rent seeking, institutional malfunction, erosion of democracy, the power of elites, corruption and producing regions' grievances all build up—violent conflicts erupt. So-called politically exposed persons invest much personal capital to build

criminal gangs and militia to loot natural resources. The persistent violence in eastern Democratic Republic of Congo exemplifies such moves, which have considerably contributed in weakening state authority while facilitating the entrenchment of militias and other armed groups (see ECA, 2015).

Even in democratic systems with legitimate political competition, it is argued, natural resource dependence may translate into authoritarian government by making democratic consolidation difficult. When state capacity is weak and a state cannot enforce the law, incumbent politicians have much discretion in allocating resource rents to voters in return for political support. If the opposition is unable to break this incumbency advantage, resource rents may translate into one-party dominance.

Ross (2015) finds strong evidence that one type of mineral wealth—petroleum—has at least three deleterious impacts: it makes authoritarian regimes more durable; worsens corruption; and helps trigger violent conflict in low- and middle-income countries, particularly when the deposit is in the territory of marginalized ethnic groups. The effects on authoritarianism and conflict appear to be recent phenomena, emerging after the 1970s.

In short, natural resources affect institutions, the drivers of development, peace and security. It is the quality of institutions that largely determines how countries perform with discoveries of natural resource deposits and export booms, and so income per capita, foreign direct investment, real savings, aggregate investment and many other aspects of economic life.¹³

CONCLUSIONS

This chapter has sought to establish the theoretical and empirical links between an economy's natural resource dependency and intensity and its economic, social and political development outcomes. The focus of much of the literature is the boom and bust nature of natural resource exports and prices and the risks they pose to economies, politics and society. These impacts have been mostly negative for Africa but vary, not least by the quality of economic and political institutions.

Governance as protection of the rights of communities to resources and to participate in the benefits of these resources is a crucial aspect of managing natural resources, the more so given competing uses, interests and contested claims; the tendency of the political elite to ally with international corporations to capture resource deposits; and the remoteness of natural resource wealth, making it easier for communities to be dispossessed. Good natural resource governance aims to protect the livelihoods of communities and to hold corporations to account.

Governments have choices about their policies and institutions: they can decide on models of ownership; how extraction rights are allocated; how tax policies should be designed; what administrative instruments are used to collect revenue; how resources are distributed to citizens; and how resources are transformed into productive economic assets. Governments therefore need to ensure a sound governance regime to maximize the benefits of natural resources, but designing interventions that work is a huge operational challenge—as seen throughout this report.

¹³ Institutional quality generally refers to such factors as protection of property rights and the rule of law, social infrastructure, investors' expropriation risks, bureaucratic effectiveness and the degree of clientelism in the public sector.

The background is a solid orange color. In the top right corner, there is a large, stylized 'U' shape outlined in a dark teal color. On the left side, there is a horizontal white bar with rounded ends, containing a large white number '2'. Below this bar, there is a large teal shape on the left, and a white rounded rectangle to its right. The text 'Institutional and regulatory frameworks' is positioned to the right of this white rectangle.

2

**Institutional and
regulatory frameworks**

Much of the continued economic underdevelopment and low human development of most of Africa's resource-rich economies has been attributed to the natural resource governance regime. There is overwhelming evidence that the quality of institutions determines a country's growth and development (Acemoglu, 2008; North, 1990). Strong economic governance institutions are equally critical facilitators of economic growth and development (Acemoglu et al., 2001). Mehlum et al. (2006) argue that institutions may be decisive for how natural resources affect economic growth. This has been evidenced in countries with a poor rule of law and weak institutions, where natural resources impede growth as entrepreneurial resources shift from production into unproductive activities, undermining the economy's ability to respond to external shocks (Rodrik, 1998). The growth effects of revenue booms work depending on governance qualities, mainly institutional effectiveness (Collier and Goderis, 2007).

States often face obstacles in delivering good natural resource governance. Some African countries have applied disparate frameworks and principles, with varying rates of success (see Chapter 6). These principles include human rights, rule of law, transparency and accountability, and these have implications for development planning outcomes.

Governance has two main roles—regulation and enabling—and natural resource governance has to be conceptualized and executed with these two aspects in mind, at the national and continental levels. For example, what would be the role of industrial and trade associations in shaping institutional evolution? What are the institutional challenges for governance in tax administration? There is a need for policies to consider each other because decisions made in different ministries, departments and agencies should not be made in “silos” but should encourage coherence.

Institutional and regulatory frameworks cover a wide scope and vary by commodity type. These regimes are designed to address objectives including ownership, allocation of rights, the sharing and management of revenues, and growth of local business capabilities; to maximize local content; and to catalyse links and diversification.

2.1

CURRENT FRAMEWORKS STRUGGLE TO PROMOTE GOOD NATURAL RESOURCE GOVERNANCE

2.1.1 Institutional frameworks

The natural resource governance landscape in Africa and its frameworks reflect the endurance of local norms, customs and practices in the use of natural resources, especially in rural areas, and the interventions of the state, the private sector and civil society since colonial times. Historically, governance interventions have been centred on natural resources such as minerals, hydrocarbons, and land and forests, mainly to promote economic activity. In more recent times the state has intervened more to ensure environmental protection and compliance with its international commitments (Box 2.1).

A constitution is the highest articulation of a governance framework at the national level. Table 2.1 provides examples of constitutional and legislative provisions in 10 African countries. Since the early 1990s, constitutional provisions of several African countries show heightened interest in good natural resource governance while recognizing traditional provisions for protecting property rights and compensating for expropriation.

BOX 2.1

Ownership and control of natural resources

Ownership rights to natural resources are a very important aspect of governance. In the early post-colonial period mineral resources were nationalized through legislation as part of assertions of nationhood and sovereignty over the resources, which had been central to the exploitation approach of the colonizers.

In 1953 Egypt passed a law nationalizing mineral resources, and many other African countries followed in the 1960s and 1970s. Countries that gained independence more recently—Namibia, South Sudan and Zimbabwe—provided for public ownership of natural resources in their new constitutions. Ghana, Kenya and Nigeria have replaced the earlier independence nationalization laws with similar provisions in more recent constitutions.

In Nigeria, public ownership of minerals, mineral oils and natural gas comes under Section 44(3) of the 1999 Constitution, and legislative power over these is reserved for the federal legislature. In South Africa the Minerals and Petroleum Law provides that natural resources are the common heritage of all the people of the country, while the state is the custodian for the benefit of its citizens.

Water resources and land are also owned by the state in some countries, and in many the state tightly regulates access to forest resources where they are not nationalized. African countries have nationalized land with varying consequences for prior ownership rights. Nigeria's 1978 Land Use Act vested all land in each state of the federation in the governor of the state in trust and for the common benefit of all Nigerians. It abolished ownership rights of communities and individuals and converted them into rights of occupancy. The act has been entrenched in the current Nigerian constitution. Similarly, in Ethiopia all land was nationalized in 1975.

The nationalization of natural resources is often justified on the grounds that it protects and advances the common interests of citizens. On this basis, the role of the state is that of a trustee, and thus the use of resources should be seen to advance the common good with a clear long-term plan. Governance mechanisms should also provide for accountability to citizens anchored on transparency, participation, management of diversity and access to information. Some constitutions, notably those of Ghana, Kenya and South Sudan, set out regimes of transparency and accountability for natural resources.

However, this coherent narrative is weak in most African countries, and public ownership is reduced to the control of the political authorities. But the contemporary situation is evolving from the early post-colonial period where “state” and “people” were conflated by the ruling elite.

Source: ECA Staff.

TABLE 2.1 Ownership, regulation and sharing in 10 African countries

Country	Assignment of ownership in the constitution	Regulation of management and sharing in the constitution or ordinary legislation
Angola	"The solid, liquid and gaseous natural resources existing in the soil, subsoil, territorial waters, in the exclusive economic zone, and in the continental shelf shall be the propriety of the State". Article 16.	The state "shall determine the conditions for concessions, surveys and exploitation". Article 16 of the Constitution.
Cameroon	Mining and natural resources are subject to national parliament legislation. Article 26.	According to the application decree of the mining code of 2002 royalties on minerals (an ad valorem tax): 75 per cent to central government 25 per cent to riparian local councils and communities. According to the 1999 Law of Forestry, royalties on forests are shared 50 per cent to central and 50 per cent to local government.
Chad	"The state exercises its complete and permanent sovereignty over all national wealth and natural resources for the wellbeing of the whole national community". Article 57.	According to the 1999 Petroleum Revenue Management Law, Eastern Logone, the country's oil-producing region, receives 4.5 per cent of the royalties.
Democratic Rep. of Congo	"The State has permanent sovereignty over soil, subsoil, waters, forests, airspace, lakes, rivers, sea, coastal and continental shelf". Article 9.	The mining law of 2002 sets the sharing rates for natural resource revenues: 60 per cent to the national government and 40 per cent goes to the provinces, from which 10 per cent is allocated to their local communities.
Ethiopia	"...the right to ownership ... to all natural resources is exclusively vested in the State and the people of Ethiopia". Article 40.	The right to ownership of rural and urban land, as well as all natural resources, is exclusively vested in the State and in the peoples of Ethiopia. Article 40 (3).
Ghana	"Every mineral in its natural state is under or upon land in Ghana is the property of the republic as is vested in the President in trust of the people of Ghana". Article 257.6.	The Mineral Development Fund established in 1993 receives 20 per cent of mining royalty payments. Half the fund is distributed in the mining areas to mitigate the effects of mining: 25 per cent via the district assemblies and the rest to local communities.
Kenya	"All land in Kenya belongs to the people of Kenya collectively as a nation, as communities and as individuals". Article 61 (f)	"All minerals and mineral oils as defined as public made by law". Art. 62. "The State (a) ensures sustainable exploitation, utilization, management and conservation of the environment and natural resources, and ensures the equitable sharing of the accruing benefits". Article 69 of the Constitution.
Nigeria	Federal government is owner and has "control of all minerals, mineral oils and natural gas." Section 162,1.	"The principle of derivation shall be constantly reflected in any approved formula, as being not less than 13 per cent of the revenue accruing to the Federation Account directly from any natural resources". Section 162.2 of the Constitution.
South Africa	All citizens have the right to a "secure ecologically sustainable development and use of natural resources". Section 24.	Mineral and Petroleum Resources Development Act of 2002: "Mineral and petroleum resources are the common heritage of all the people of South Africa and the State is the custodian thereof for the benefit of all South Africans". The Public Finance Management Act of 1999 establishes that the Minister of Minerals and Energy may determine that any community or local government may receive a payment from mining royalties. The payment goes to the Local Economic Development Fund managed by the national Department of Provincial and Local Government.
Uganda	Ownership is vested in the "Government of behalf of the Republic of Uganda". Art. 244.	Minerals and oil are exploited "taking into account the interest of the individual landowners, local governments and the Government". Art. 244 of the Constitution. According to the Mining Act of 2003 the central government is entitled to 80 per cent of the mining royalties, the local government of the producing areas are entitled to 17 per cent and the owner of the land gets 3 per cent.

Source: Compiled by ECA Staff from various source.

The natural resource sector in African countries has become increasingly overlaid by external initiatives. These include African regional instruments, those of global bodies (such as the United Nations), regional bodies (such as the European Union), national laws of powerful countries (such as the United States) with extra-territorial effect and private voluntary initiatives that exert substantial influence, owing to the backing of international multilateral institutions. These are discussed in Section 2.3.

These instruments have broadened the range of actors and mechanisms. The main actors are central and local governments (sector ministries, planning agencies, tax administrators, environmental management offices, local government authorities and national oil or mining companies), legislatures and their committees, and the judiciary and quasi-judicial bodies (Figure 2.1). The key non-state actors include the private sector and local communities and their representatives; traditional leaders; and civil society organizations, including trade unions, faith-based organizations and the mass media. Donor institutions and their governments also remain influential in some countries.

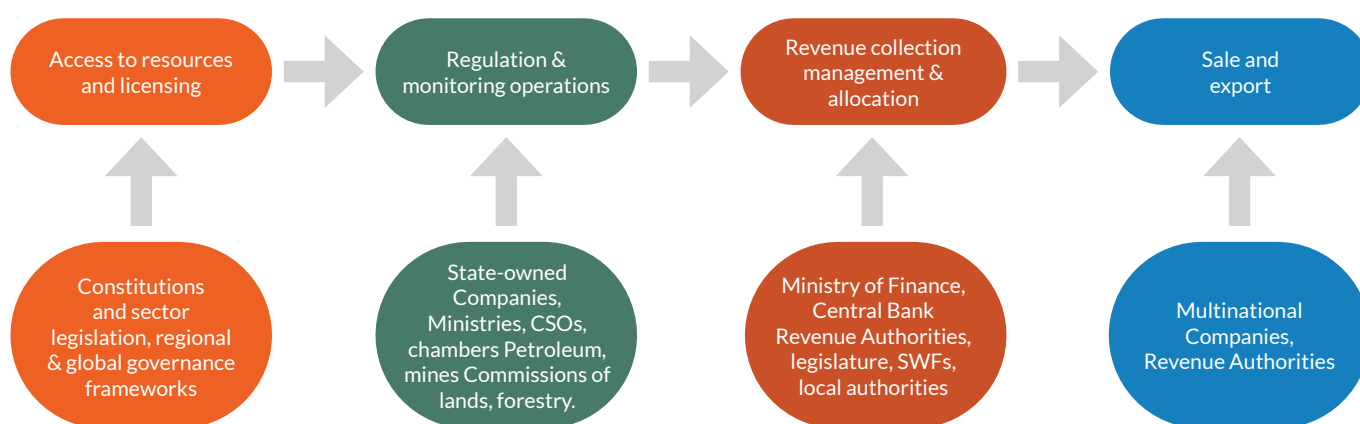
The inclusion of arbitration clauses in many resource exploitation contracts with foreign investors is part of the “sticky” dispute resolution processes. Political liberalization in Africa

and global consensus on public participation and consultation, as part of the Sustainable Development Goals, have extended and deepened citizens’ voice and participation in natural resource governance in Africa, blurring the boundaries between formal and informal institutional governance frameworks. Citizens and civil society organizations are increasingly involved early in decision-making on resource governance regimes, such as at the contract negotiation stages, while the media are important in the drive for accountability and transparency.

2.1.2 Government ministries and agencies

At the helm are the government administrative, regulatory and licensing bodies, including ministries of finance and planning, ministries for lands and forests, mines departments, autonomous planning bodies and geological survey agencies. The key oversight bodies are the legislature and supreme audit offices. The main public financial management entities are central banks and tax administration authorities, as well as sovereign wealth funds, for revenue management (see Section 2.2 and Box 4.6 in Chapter 4). Countries have taken steps to create semi-autonomous entities for specialized functions, such as the Tanzania Minerals Audit Agency (Table 2.2).

FIGURE 2.1 Natural resource governance institutional landscape



Source: ECA staff.

TABLE 2.2 Tanzania's framework for mineral resource governance

Institution or semi-autonomous agency	Functions
Ministry of Energy and Minerals	Principal regulatory body: grants mining licences
Commissioner for Minerals	Advisory roles: grants and processes licences (such as prospecting licences)
Mining Advisory Board	Advises the minister
Mineral Resource Institute	Develops skills
Ministry of Finance	Manages revenue
National Planning Commission	Advises government on medium- and long-term strategies for socio-economic development; monitors and analyses development trends
Judiciary	Prosecutes economic and commercial crimes
Legislature	Public Accounts Committee for oversight and accountability
Tanzania Revenue Authority	Collects revenue
State Mining Corporation	Oversees mineral exploitation and development by private companies on behalf of the government
Tanzania Extractive Industries Transparency Initiative	Oversees implementation of Extractive Industries Transparency Initiative; has 16 representatives drawn from government, firms and civil society
Tanzania Minerals Audit Agency	Monitors quality and quantity of mineral exports and the financial performance of mining companies
National Environmental Management Council	Enforces environmental standards and conducts environmental impact assessments

Source: Compiled by ECA staff from various sources.

The legislature

The legislature is a key player. Through its three core functions—legislative, oversight and representative (Figure 2.2)—it is critical to harnessing natural resources for domestic revenue mobilization.

The legislative (that is, law-making) function gives parliament the responsibility for drafting and reviewing bills and passing legislation for natural resource management and reform (World Bank Institute, n.d.). Parliament can introduce laws to improve disclosure and accountability needs, value addition in the resource value chain (see Section 3.4 in Chapter 3) and fiscal rules to maximize revenue. Legislators in some countries have strengthened execution of the Extractive Industries Transparency Initiative (EITI) by ensuring its adoption in legislation.

On its oversight function, parliament has the power to initiate and conduct investigations into policy and regulatory compliance concerns and revenue management and expenditure issues. It can, for example, hold committee hearings, investigate findings of the public auditor and

sanction judicial prosecutions. Most parliaments have established public accounts committees as investigative mechanisms for government revenue distribution and expenditure. Some parliaments have established more specialized subcommittees, such as finance committees or budget committees. A committee on extractive industries is an effective way for legislators to organize and coordinate their involvement. In this regard, Nigeria's National Assembly established resource-specific committees, including the Solid Minerals Committee, the Local Content Committee, the Upstream and Downstream Petroleum Committees and the Water Resources Committee. However, multiple committees can lead to overlapping mandates.

Through its representative function, parliament ensures that resource governance includes the voice and interest of the public and of communities affected by operations, mainly by conducting public hearings, media interviews and constituent outreach. Legislators ideally should incorporate citizens' input into decision-making processes and build public awareness of the challenges and opportunities associated with natural resource management, but few do.

FIGURE 2.2 Three core functions of legislatures in natural resource governance

LEGISLATIVE

- Securing the public disclosure of extraction contracts, through committee hearings.
- Amending and ratifying legislation on management (laws governing fiscal regimes, revenue collection and management, and conditions for exploration and production).

OVERSIGHT

- Assessing and monitoring compliance with rules specified by contracts and laws.
- Monitoring the performance of government agencies responsible for managing natural resources.
- Scrutinizing revenue projections and allocations as part of the annual budget process.
- Querying and investigating public spending of resource revenues and reviewing information and data on extractives.

REPRESENTATIVE

- Building consensus in political parties to preserve long-term strategies and rules for sector governance over political cycles and changes of government.
- Consulting, informing and managing expectations of constituents and stakeholders in resource-rich regions and representing constituents' interests.

Source: Adapted from NRG1 (2015).

Executive dominance

In the vast majority of natural resource-rich countries, the executive wields considerable control over the legislature, in law and practice. In Ghana, executive control over minerals was established as far back as the colonial period, and the majority of Members of Parliament still do not oversee or influence policy on extractives (Oxfam, 2016; Sakyi et al., 2010). Despite the remarkable progress that has been made by the Ghanaian parliament over the years, perceptions of its weakness in relation to the executive persists, including the belief that its role in reviewing and approving budgets (Box 2.2) is often undermined by

the executive pressure to quickly move legislation forward without amendments (Bryan and Hofmann, 2007). Executive dominance and influence in most countries are seen through majorities in ruling parties, which can often achieve legislative approval for their budget proposals and for supplementary or additional financial proposals without proper fiscal justification (partly explaining unaccountable use of resource revenues). While a strong executive can provide visionary leadership for good management of resources, the failure to respect legislative functions undermines the fundamental separation of powers, which is key for checks and balances of executive excess and abuse of state power.

BOX 2.2

The budgetary process as a mechanism of natural resource governance

Budgeting is an integral part of governance as an instrument for allocating and redistributing resources. Budgets provide the basis for resource mobilization and allocation to government strategic areas and national priorities (Olomola, 2006; Omolehinwa, 2001). Given the huge contribution of resource revenues or profits to national budgets, an analysis of the budget process is useful.

Over the last decade African countries have introduced changes to public financial management that have improved budgeting (ECA and OECD, 2015). To address transparency needs, online budget portals have helped increase the amount of budget information that governments are required to publish, notably in Botswana, Kenya, Tanzania and Uganda. Civil society participation in budgeting processes is also increasing in these countries.

Additionally, institutional reforms, such as setting up dedicated units to coordinate timely publication of budget information, have been important. For example, the Open Budget Index has found progress in budget transparency in several African countries (IBP, 2015). To strengthen the role of parliaments, some subregions (such as the Southern African Development Community) have set up parliamentary budget committees to network and share knowledge on budgetary best practices in order to widen scope for their effective involvement and oversight of the executive in public resource utilization (Chizema, 2013).

However, the budgetary process in some African countries is marked by irregularities, abuses and political pressure in the form of unjustifiable extra-budgetary expenditure and disregard for budgetary rules. Lack of budget discipline, transparency and accountability are common in resource-rich countries, especially the leading oil exporters. Only a few countries provide access to all budget information (IBP, 2015). A common problem is that legislatures are not given enough time to review the budget proposal before it is passed and lack analytical and research capacity. Chad, Egypt, Equatorial Guinea and Sudan still fail to publish the executive's draft budget—a basic budget document for opening public debate and monitoring (IBP, 2015).

Source: ECA Staff.

Regulatory and licensing institutions in the extractive industry

Most African countries have adopted legislation to regulate the exploration and production of minerals and hydrocarbons. The mandate to grant access through licensing is usually vested in the ministry for the sector or resource. In South Africa and Zambia the minister has the discretion to grant licences for large-scale mining (ECA and AMDC, 2017). The

minister's discretionary powers vary by country and are often subject to other constitutional and administrative processes. In South Africa the minister is supported by many stakeholders of the Minerals and Mining Development Board (ECA and AMDC, 2017). Many countries have set up semi-autonomous regulatory bodies, commissions and mineral departments, within ministries, to regulate activities along the value chain. Article 269 (1) of Ghana's 1992 Constitution provides

for the creation of commissions for minerals, forestry, lands and fisheries, although the Minerals Commission Act of 1993 gives the Office of the President exclusive authority to appoint and remove members of the Mining Commission, thus making it virtually impossible for regulatory bodies to function independently.

Weak transparency in licensing

The lack of uniformity in licensing is a challenge in several countries. Each licence is based on an individual contract usually informed by the discretion of public office holders. As the experience of Zambia shows, this can result in substantial revenue losses for a country (Simpasa et al., 2013). Although there are many types of mining licences (prospecting or exploration, production and artisanal and small-scale mining), the key difficulties relate to lack of transparency in issuing licences and to weak execution and enforcement of mining laws and regulations.

Despite global and regional efforts, the lack of transparency in negotiating contracts and concessions is a deep-seated governance challenge for Africa.

Despite global and regional efforts, the lack of transparency in negotiating contracts and concessions is a deep-seated governance challenge for Africa. All eight country case studies undertaken for this report show some secrecy in awarding licences (see Chapter 6). For example, although the legal system in Egypt requires open bidding, it is unclear how the winning bids are selected. Egypt's model contract is publicly available, but the final contracts are not. Similarly, the Resource Governance Index 2017 found that in Nigeria licensing is the government's weakest link in oil and gas value realization, with a score of 17 out of 100.

The score reflects the high opacity in key decisions involving the qualification of companies, process rules and disclosure (NRGI, 2017c).

In Uganda, some stakeholders who were interviewed by an ECA staff during a data collection field mission to the country in mid-2017, indicated that there were serious loopholes in the country's the "first come, first served" licence procedure, which sometimes enable the winning of bids by otherwise unqualified companies, including through leveraging political connections. Yet, other interviewees during the field mission explained that the evaluation of the competency and capacity of companies is sometimes not as rigorous as envisaged in various laws and regulations, allowing for diverse forms of corrupt practices, especially bribery. Various interviewees and available literature converge on the fact that these loopholes and associated corrupt practices have been a major hindrance to foreign investment (Global Witness, 2017). Likewise, in Ghana's petroleum industry open tendering or bidding for licences is yet to be entrenched as common practice. Rather, contracts continue to be awarded through closed processes, contrary to the Petroleum (Exploration and Production) Law (PNDC Law 84), which requires that copies of applications for petroleum agreements be forwarded to a public agreements board (Oxfam, 2016). However, good practices in licensing regimes are seen in Botswana, Namibia, South Africa and Tanzania.

The judiciary

A strong and independent judiciary—consisting of courts and quasi-judicial bodies, mainly in adjudicating disputes and enforcing laws—is crucial for natural resource governance. It often has to settle disputes involving interpretation of the constitution and related laws and to remedy irregularities. It also has an oversight and accountability role because it has the power, through judicial review mechanisms, "to review executive and administrative conduct or actions of the state, state organs, state departments, and state officials" (Sihanya, 2012, p. 5). The judiciary also has a duty to enforce the law, including contracts and licence agreements, production-sharing agreements and

tax clauses, as well as environmental and human rights obligations, through decisions or orders. In many African countries, quasi-judicial bodies such as anti-corruption and economic-crimes courts have prosecuted corruption and illegal export trade but are still prone to political influence and conflict of interest, mainly in matters relating to land.

In the extractive industry although some African countries' judiciaries have been able to prosecute a number of disputes against multinational corporations, majority of them still lack the capacity to prosecute highly technical cases. As a result, so quite a few such cases have gone to courts in the jurisdiction of foreign corporations— as seen in the Ugandan Government's protracted tax dispute with Heritage Oil and Tullow Oil (See Myers, 2010). Finally, many judicial bodies still operate in isolation from other regulatory institutions.

National oil or mining companies

An important difference between the hydrocarbon and mining sectors is the task of national oil or mining companies. Most national mining companies were dissolved or privatized in African countries in the early 1990s, with local miners now largely confined to artisanal and small-scale mining.

In hydrocarbons, national oil companies—such as Sonatrach (Algeria), Nigerian National Petroleum Corporation, Sonangol (Angola) and GEPetrol (Equatorial Guinea)—are the norm. Countries joining the oil and gas industry, especially in East Africa, have set up national oil companies, including the Uganda National Oil Company, in 2015. The continent now has almost 30 such companies. Based on research on local content in the oil sector in Angola and Chad, Mushemeza and Okiira (2016) concluded that national oil companies represent a key institution in the management of natural resources in many African countries. Worldwide, companies such as Norway's Statoil, Saudi Aramco, Brazil's Petrobras and Chinese national oil companies are key players in the production, sale and promotion of local-content and economic links, accounting for the bulk of global oil reserves and production. International oil companies usually have to operate with them (Al-Fattah, 2013).

The African national oil company landscape offers a mixed picture in efficiency, accountability and transparency, with some of the older national oil companies having unenviable reputations as symbols of the opacity of public resources, and thus presents a concern, especially for domestic revenue mobilization. For instance, the Egyptian General Petroleum Corporation does not perform well on disclosure of commodity sales (NRGI, 2017a). Tanzania's State Mining Corporation was revived in 2013 after a period of inactivity. Its weak score on the governance assessment is partly due to the absence of publicly disclosed rules on financial transfers between the company and the government (NRGI, 2017b). With oil prices predicted to remain low and demand certain to be affected by the accelerating shift to renewable energy, some commentators argue that African governments should start rethinking the mandate of their national oil companies towards evolving from oil to energy companies, with the benefit of their current asset base (PwC, 2017).

2.1.3 Artisanal and small-scale mining

Artisanal and small-scale mining, while offering more direct and indirect job opportunities than large-scale operations do, remains marginalized and unengaged by government in most mineral development strategies. Conflict between large-scale mining companies and artisanal and small-scale mining over land and resources is common, and governments tend to favour the former and in extreme cases even ban artisanal and small-scale mining operations (Buxton, 2013). While the importance of artisanal and small-scale mining is well recognized by the Africa Mining Vision (AMV) and a programme cluster is devoted to it in the AMV Action Plan, national efforts remain inadequate. Even if some African countries have reviewed their mining policies to mainstream artisanal and small-scale mining, most practices are oriented to supporting large-scale operators.

Still—and notably—Tanzania's Mining Act contains a special regime for artisanal and small-scale mining, with provisions for simplified mining regulations, registration procedures, mineral rights and duration of tenure. The government

also supports programmes to lift the capacity of small miners and promote the subsector, which is an important source of rural entrepreneurship and employment. However, in Ghana, Uganda and other countries there are still concerns about artisanal and small-scale mining subsectors receiving discriminatory treatment on access to productive land. Most licensing procedures are too inflexible to accommodate artisanal and small-scale mining.

2.2

INSTITUTIONS FOR REVENUE COLLECTION, MANAGEMENT AND DISTRIBUTION

Natural resources are the biggest source of domestic public revenue in Africa: resource taxes averaged 40 per cent of tax collected in 2008–2011. In Algeria, Angola, Botswana, Chad, Republic of Congo, Equatorial Guinea, Libya and Nigeria, resource taxes were the equivalent of more than 20 per cent of GDP. How to

maximize fiscal returns from extractive resources, stabilize financial flows in the face of commodity price volatility, provide for inter-generational equity and share the benefits equitably between the state and different sections of society are issues for institutions dealing with revenues (see Chapter 4).

There is a consensus that Africa's natural resource tax regimes are suboptimal and favour foreign investors. African governments face an uphill task in ensuring that the public treasury gets an optimal share of revenues from resource exploitation while offering investors a regime attractive to investment. This is not an easy balance to strike, especially in the mineral and hydrocarbon sectors, owing to knowledge gaps and asymmetries, inadequate technical skills and institutional deficiencies in a context of market volatility. Natural resource industries also have special features that result in their being taxed differently from others, creating particular administrative challenges (Calder, 2014).

These issues have impacts on domestic revenue mobilization efforts. One approach is to use a mix of fiscal regimes and tax instruments.¹⁴ Tax rates and

BOX 2.3

Zambia Revenue Authority: Mineral Value Chain Monitoring Programme

In 2017 the government commissioned the Zambia Revenue Authority to lead a multi-institution project for monitoring the country's mineral production and sales, against a background of little coordination among government agencies and inconsistencies in reporting of mineral production and export.

The programme has enabled the government to confidently verify mine production by value, content and quantity at each mine and in the whole sector, using the latest equipment—x-ray fluorescence analyser machines—on all exports of minerals, mineral ores and concentrates before they leave the country. Lower costs and compliance burdens in reporting to the Ministry of Mines have also simplified procedures for obtaining export and import permits. It is too early to judge whether these changes led to increases in tax revenue collection.

Source: Ministry of Finance Zambia and Mineral Value Chain Monitoring Project (www.mvc.org.zm).

¹⁴ Including special taxes, such as royalties, bonuses, rentals, production and sharing payments, profit taxes, excess profit tax and repatriation of profit taxes, as well as negotiated contract-based tax regimes (Lemgruber and Shelton, 2014).

instruments therefore vary widely across countries and commodities. In minerals specific fiscal aspects are often included in standalone mineral development agreements, with constraining stability clauses (ECA and AMDC, 2017). This presents a complex set of fiscal rules and instruments for tax administration, leading to further fragmentation and additional coordination constraints across government agencies. It also opens opportunities for tax evasion.

Increased awareness of illicit financial flows has recently inspired interventions driven by global and regional players.

Increased awareness of illicit financial flows has recently inspired interventions driven by global and regional players to curb illegal exploitation and export of natural resources. Tax authorities in many resource-rich countries, notably Zambia, have launched regulatory requirements. Democratic Republic of Congo, South Africa and Zambia (Box 2.3) have set up financial investigation units at their central banks (ECA and AMDC, 2017). However, capacity and skills to tackle sophisticated illicit financial flows are low there.

2.2.1 Stabilization funds and sovereign wealth funds

Creating a stabilization fund is a common approach of resource-dependent countries to manage volatility, smooth transfers to the public budget and provide for future generations. However, Bagattini (2011) argues that there is no economic reason for establishing a stabilization fund because its functions can be achieved through fiscal policy, and its existence does not guarantee responsible fiscal behaviour by governments. Its main value is therefore political, in signalling an intention of fiscal rectitude, and (if transparently managed)

to limit theft and create a sense of ownership of natural resources by citizens.

Stabilization funds are distinct from sovereign wealth funds, which are investment funds intended to increase the assets of a country (though most of Africa's sovereign wealth funds are hybrids). More than 70 per cent of the continent's assets in sovereign wealth funds are in North Africa. Fourteen of the funds are oil- and gas-based, and three are dependent on minerals, though several of them are poorly managed, with minimal controls on the state's withdrawal of funds (see generally, Chatham House, 2014).

2.2.2 Subnational revenue allocation

Most resource revenues accrue to the central government, even if the communities near extractive operations bear the brunt of the social, economic and environmental costs. That proximity is no guarantee for them to benefit economically. Cameroon, Chad, Nigeria and Uganda transfer minimal amounts of resource revenues to the subnational level (see Chapter 5). In Madagascar the mining law requires that revenues from tax, royalties and other fees from mineral exploitation be transferred back to affected municipalities (60 per cent), regions (30 per cent) and autonomous provinces (10 per cent).

Some countries do not earmark any part of the mineral revenue to the subnational level. In Sierra Leone the central government collects all taxes and imposts and allocates part of the revenue to specified subnational entities according to a published formula, but other central governments leave specific taxes to be collected subnationally (ECA and AU, 2011).

Most transparency activists have focused on national use of mineral revenues, but there is evidence of the need for greater subnational accountability for devolved revenues (Bauer et al., 2016). There are concerns about the efficiency of natural resource-sharing mechanisms in some countries. Criticisms have ranged from poorly

designed systems to mismanagement of funds transferred to subnational governments and limited absorption capacity by recipient authorities, leading to corruption, regional inequalities or conflict. The practice of resource-revenue transfers in a federal government system such as Nigeria's has become a source of regional and ethnic tension. In particular, anger in the oil-producing Niger Delta over the lack of transparency in transferring oil revenue led to recurrent tension and demands for a larger share of revenue collected by the federal government (Ikome 2005).

2.2.3 Managing negative impacts of resource exploitation

The extraction of minerals (especially through open-cast mines) and of petroleum is usually tied to negative impacts such as pollution, destruction of ecosystems, displacement and the disruption of livelihoods in project areas. Failure to remedy them can generate larger costs later. In many countries environmental and strategic impact assessments are the main methods for identifying, planning for and managing the effects. Administering and enforcing these assessments are the responsibility of mandated agencies, though these assessments' effectiveness is open to question. A key issue is the little public involvement. Thus the harm from exploitation is inadequately managed and monitored, worsening the plight of affected communities.

2.2.4 Governance of land and forest resources

Land is a fundamental resource of great importance for Africa's societies and economies. It is the main source of livelihood for most of the population, especially in rural areas and for those

engaged in agriculture. The main management and domestic revenue mobilization challenges arise from tenure insecurity, inequities in access to land, and environmental degradation. Responses to these challenges are framed by the fact that land tenure is a zone of legal pluralism—a mixture of norms formally defined in laws and court decisions and in customary practices among ethnic groups or communities. The governance of land, and to a lesser extent of forests, is less centralized than that for mineral resources and involves statutory and customary systems, and even civil society organizations (FAO and UN Habitat, 2009).

State control over land through ownership or trusteeship is widespread in Africa, but land remains predominantly owned by communities, families and individuals, mainly under customary law. The state has a regulatory role through the recognition and enforcement of land rights. Its powers of compulsory purchase—often used in support of large extractive and agricultural projects—can permanently dispossess owners and users of land, with far-reaching socio-economic and political consequences.

Across the continent, customary tenure is under increasing pressure from urbanization, commercial agriculture, mining, forestry and tourism. In addition, some traditional leaders abuse their powers to the detriment of the owner groups by entering into land deals for commercial projects. The result is that farmers and pastoralists alike are losing the foundation of their livelihoods. These patterns are engendering multiple conflicts within land-owning groups and between different groups. Mutual suspicions between autochthons and migrants are increasing, fuelled by growing land scarcity. Competition for land is triggering conflict in some countries and is blamed for some of the most serious civil conflicts in parts of Cameroon, Côte d'Ivoire, northern Ghana and the Jos Plateau area in Nigeria (Tsikata, 2015).

Several countries are reforming policy to improve security of tenure, often involving a more broad-based approach in recognizing all rights in land. Côte d'Ivoire, Ethiopia, Madagascar, Mozambique

Failure to remedy the negative impact of natural resource exploitation can generate larger costs later.

and Uganda have found new ways to recognize and register customary interests in land. In Côte d'Ivoire this approach began through community-based forestry management (Amanor, 2012). An increasing number of countries are decentralizing land titling and registration. Development partners have shown support for land administration reform projects across Africa. Former settler colony countries, such as Namibia, South Africa and Zimbabwe, face unique problems of land redistribution and have adopted instruments for restitution and redistribution (Cotula et al., 2004).

Several countries are reforming policy to improve security of tenure, often involving a more broad-based approach in recognizing all rights in land.

There almost seems to be a “land curse” given the pressures of population, which will increasingly present the continent with potential for conflict, including that based on national food, and wider, insecurity (Kararach, 2014).

Growing recognition of women's rights to land

Despite constitutional guarantees of equal status and treatment beyond international and continental conventions on gender equality, women in Africa still face discrimination in land matters. Women's land rights are inferior under most customary tenure systems, a plight worsened by growing privatization of customary land rights. Improving women's land rights has been a key aspect of civil society organization campaigns, and several governments have adopted reforms. In 2003 the Ethiopian government introduced land-title certificates in the joint names of spouses. Rwanda's Organic Land Law, enacted in 2005 recognizes women's land rights, where both men and women can register titles, while Uganda's land

law of 1995, amended in 2010, requires spousal consent to dispose of or sell land.

Policy and institutional best practices and challenges in forestry governance

Africa's forests are an important economic and environmental resource. Unlike land, the ownership of forests is mainly in the hands of the state, a legacy of the colonial interest in commercial timber extraction for export. More than 98 per cent of forested land in Africa, south of the Sahara is publicly owned. While laws recognize customary land titles and rights, governments regulate the access of rural communities to forests, mainly for customary use, like collecting non-timber forest products, such as firewood (USAID, 2012). In Democratic Republic of Congo firewood is estimated to be 10 times the value of commercially extracted timber. State regulation of forest resources has failed to prevent widespread deforestation across Africa, presenting a major threat to the environment, economic development and the fight against climate change. Decades of commercial over-exploitation have taken their toll, and illegal logging is still massively prevalent (Weng, 2015).

The need to improve forest governance has engendered new approaches. An increasing number of countries are moving from centralized approaches to involving local communities, recognizing the limited reach and effectiveness of state bodies and the restrictions that centralized systems place on local people to manage “their” forests.

New approaches seek to create an approach that recognizes the legitimate role of the state in forest policy and that seeks to give local people legal authority to manage forest resources for economic and environmental benefits. Tanzania was among the first countries to recognize the role of communities in owning and managing forests. The 2002 Forest Act aims “to delegate responsibility for the management of forest resources to the lowest possible level of local management consistent with the furtherance of national policies”. The approach has been hailed as a best practice among African countries. This positive feature contrasts with other

experiences of devolution of rights where, despite official pronouncements, centralized control persists because state bureaucrats and national elites are reluctant to relinquish it (Roe et al., 2009). In Cameroon revisions to forestry law have enabled community associations and cooperatives to acquire exclusive rights to manage and exploit up to 5,000 hectares of customary forest, under a 15-year contract, helping create more than 100 new community forests (Roe et al., 2009).

Forms of collaborative or community-based natural resource management are being employed, especially in East and Southern Africa, with large conservation areas and game parks. For example, community-wildlife tourism ventures in Kenya on communal and private lands have been created, and in Namibia communal land conservancies covering more than 14 per cent of the country are helping wildlife recover and are reducing illegal hunting of wildlife (Roe et al., 2009).

2.3

NATURAL RESOURCE INITIATIVES IN GOVERNANCE

This section reviews six prominent natural resource governance initiatives, examining their drivers, scope and implications for domestic revenue mobilization. Of these, only the AMV is of African origin. These initiatives overlap in three broad categories: certification, contract and revenue transparency, and broad governance.

2.3.1 Africa Forest Law Enforcement and Governance

The Yaoundé Declaration on Africa Forest Law Enforcement and Governance was adopted in 2003 by more than 20 African governments, the European Commission and other member countries such as Canada and the United States. It is an outgrowth of the 1998 G8 Action Programme on Forests, which

placed high priority on eliminating illegal logging and timber trading through action in producing and consuming countries. The declaration contains principles, couched in terms of 30 activities to be undertaken by member countries with the aim of overhauling the entire governance framework in the forest sector. The declaration has formed the basis for some national actions to strengthen the governance of forest resources.

Although the Yaoundé Declaration on Africa Forest Law Enforcement and Governance is largely an externally driven initiative, it has great potential to decelerate the rate of illegal logging, reduce illicit financial flows and improve revenue from the forest sector. But it has been criticized for failing to tackle more important issues such as forest tenure systems that “almost universally marginalize the poor and forest-dependent, in favour of large industrial logging interests” (Counsell, 2005). It has not catalysed meaningful economic diversification from raw forest resources.

But the declaration cannot be relied on, alone, to ensure exploitation of forest resources in a manner that supports broad-based growth and development. Given the rate of deforestation and the problems bedevilling the forest sector, it would require a radical overhaul to be fully relevant to Africa’s forest sector. There is a need for a more grounded, African-led governance framework with more comprehensive policy and regulatory prescriptions to transform the sector from its heavy focus on export of raw timber to an integrated forest-wood products industry.

2.3.2 The Kimberley Process Certification Scheme

The Kimberley Process Certification Scheme is concerned with one mineral commodity—diamonds—and is an outgrowth of regional conflicts in the late 1990s and early 2000s. The process aims to “prevent the flow of conflict diamonds, while helping protect legitimate trade in rough diamonds”. It requires participating countries to comply with requirements, including trading only with fellow scheme members, and

to certify diamond shipments as conflict-free with supporting certification. The scheme has 54 members (including the European Union as one member), representing 81 countries. In 2015 the value of diamonds traded through the scheme was estimated at close to \$14 billion.

\$14 billion

is the estimated value of diamonds traded through the Kimberley Process Certification Scheme in 2015.

The scheme has improved governance in the exploitation and trade of diamonds in participating countries and reduced the export of undervalued diamonds (legally or illegally) from Africa. For instance, Liberia exported 60,282.06 carats of rough diamonds in 2015, for a value of \$29.3 million, up from 21,699.74 carats in 2007, valued at \$2.7 million. However, some critics such as the United Kingdom-based Global Witness argue that the scheme faces structural limitations in its capacity to address non-compliance, smuggling, money laundering and human rights abuses arising from the diamond trade. It further argues that because the scheme applies only to rough diamonds, it has little traction on cut and polished diamond stones, which rebel movements and insurgencies may use to finance their operations.

2.3.3 The Dodd-Frank Act

The 2010 Dodd-Frank Wall Street Reform and Consumer Protection Act of the United States (the Dodd-Frank Act) is a national law with international effect because of the importance of the United States in the international economy.

Section 1504 is about disclosure of payments by resource extraction firms. The section puts an obligation on the US Securities and Exchange Commission to request publicly listed companies to disclose “information related to any payments made by the company, its subsidiary, or any entity under its control to a foreign government or to the US Federal Government ... for the purpose of commercial developments of oil, natural gas, or minerals”. Section 1502 “aims to help stop mineral trading fuelling conflict in the Central African region by requiring companies to check whether they are funding conflict or human rights abuses through the purchase of minerals, including tin, tantalum, tungsten and gold”.

US President Donald Trump ordered a review of the act, which has generated considerable concern (Dizolele, 2017; Pickles, 2017; Puzanghera et al., 2017). The prospect has far-reaching implications for countries in the Great Lakes region, which made regulatory adjustments following the Dodd-Frank Act. It is still seen as positive legislation, the repeal of which would weaken their efforts to combat illegal exploitation of natural resources. However, on the downside, the Dodd-Frank Act imposed a de facto embargo on mineral exports from the region, owing to the absence of accompanying measures.

A similar Great Lakes region initiative developed a regional certification mechanism, which is harmonized with Organisation for Economic Co-operation and Development due diligence guidance for responsible mineral supply chains for conflict-affected and high-risk areas. The scheme has enabled Democratic Republic of Congo and Rwanda to sell their minerals in the US market while other countries in the International Conference on the Great Lakes Region (ICGLR) have made progress on implementing the regional certification mechanism. Countries in the region had also launched their own initiative against illegal exploitation of natural resources before the Dodd-Frank Act. The Regional Initiative against the Illegal Exploitation of Natural Resources, commenced in 2009 by the ICGLR,¹⁵

¹⁵ The ICGLR was founded in 2006 against the backdrop of the war in Democratic Republic of Congo (2002–2006) with the assistance of the African Union, the United Nations and bilateral partners.

led to the establishment of the regional certification mechanism and a certification manual, approved by the 11 heads of state. Its key achievement has been the creation of a certification instrument to track the chain of custody of selected natural resources, namely cassiterite, wolframite, coltan and gold, also referred to as conflict minerals. However, there is still concern as to whether the framework has helped reduce conflict.

2.3.4 The Natural Resources Charter

Launched in 2010, the Natural Resources Charter is a privately devised extractive-resource governance instrument concerned with maximizing revenues and prudently using resources. It has 12 precepts organized in three groups (see Figure 3.4 in Chapter 3).

The Natural Resources Charter is conducive to increasing public domestic revenue mobilization. However, its interest in building links other than the fiscal are minimal. While it has an explicit interest in project-level local benefits, the closest it gets to economy-wide links for structural transformation is the advice in Precept 10 for governments to facilitate private sector investment to promote diversification.

The Natural Resources Charter has developed a benchmarking system for assessing the policy and regulatory framework of a country's extractive sector.

The Natural Resources Charter has developed a benchmarking system for assessing the policy and regulatory framework of a country's extractive sector, applied to, for example, Nigeria (oil and gas), Sierra Leone and Tanzania. In 2011 the Natural Resources Charter was adopted by the New Partnership for Africa's Development as a flagship assessment programme on natural resource governance, having been endorsed in 2009 by the African Development Bank.

2.3.5 The Extractive Industries Transparency Initiative

The EITI was launched in 2003 to combat corruption in the extractive industry by promoting transparency of payments and revenues. It now covers 51 countries, 23 of them in Africa. The EITI evaluates members using the EITI Standard, leading to recommendations for improvements. It comprises governments, companies and civil society and has expanded the range of issues to be disclosed and how to disclose them.

The multi-stakeholder approach used in the implementation of the EITI has contributed to better technical coordination in resource administration and management at the national level. Particularly, the established coordination structures and units constituting several stakeholders accounts for better information sharing and addressing challenges in the sector. Sierra Leone's Extractive Industries Revenue Taskforce is a good example, in this respect: it pushed for the reduction of export duty on gold and curbed smuggling (EITI, 2017).

Through the EITI initiative, African countries have seen better and stronger monitoring in the minerals industry. EITI was instrumental in the development of Zambia's Mineral Value Chain Monitoring Project (see Box 2.3). Monitoring capacity of ministries of mines has also been strengthened through this initiative.

The EITI has helped lift revenue collection in extractives. Its Nigerian country report identified missing payments of close to \$10 billion. After a government audit, \$2 billion was recovered for the federal government through EITI efforts (EITI, 2013). In Guinea at least \$11 million was paid to local communities, with over \$9 million going to local development (EITI, 2017).

One shortcoming of the EITI (Lehmann, 2015, p. 9) is the "lack of a causality chain or theory of change" on how it intends to contribute to long-term national development outcomes. Transparency itself cannot be the ultimate goal because, for instance, while governments may occasionally "open up the books", civil society organizations in many countries lack

the capacity to interpret the data. In Uganda little collaboration among civil society organizations (Van Alstine et al., 2014) causes implementation difficulties. So although transparency has generally improved, the EITI has not (so far) contributed to long-term societal transformation or even to much less corruption (Le Billon, 2011; Lehmann, 2015).

The EITI also relies on civil society mechanisms to hold governments accountable, implying that where civil society organizations are weak or restricted by government, the initiative does not perform well. The initiative also falls short by assuming a good relationship between state and non-state actors, but the two sides are antagonistic in many countries—in fact, civil society space in many Africa countries continues to shrink (Oxfam, 2016). More broadly, the EITI seems to be operating in many African countries as an enclave of good governance that improves the social licence of extractive companies in a country, amid a larger sea of official and corporate corruption.

The EITI has also been criticized for not putting enough obligations on corporations, especially their trans-boundary transactions. This has raised questions about the objective of the initiative and is seen to defeat the very intent of transparency.

The EITI includes only a small minority of extractive countries, with producing and host companies. Most members are poor, aid-dependent developing countries (Compagore, 2013). Its voluntary nature has been questioned, with critics citing the influence of donor countries and institutions as the main reason why many developing countries join, as seen in 2005–2011 when membership surged from 8 to 35 and when the International Monetary Fund made EITI membership a condition for receiving the benefits of the Heavily Indebted Poor Countries (HIPC) Debt Relief Initiative, “blurring the line between incentives and conditionalities. Countries like Cameroon, Chad, Democratic Republic of Congo, Republic of Congo and Sierra Leone arguably acceded to EITI not voluntarily but under HIPC conditions” (Ferreira, n.d.). In addition, Afghanistan and Iraq joined while under US occupation.

2.3.6 The Africa Mining Vision (AMV)

The AMV is the most important continent-wide natural resource governance initiative of the last decade, adopted by Africa’s Heads of State and Government in February 2009. It sets out the long-term aspirations for a “transparent, equitable and optimal exploitation of [Africa’s] mineral resources to underpin broad-based sustainable growth and socio-economic development”. It is not only about mining sector policy, but is an inter-sectoral programme for how minerals can contribute to Africa’s structural transformation centred on industrialization—and in a manner that responds to issues of impacts, the role of artisanal and small-scale mining, popular participation, transparency and accountability, and improvements to institutions.

Its action plan gives operational form to the objectives, organized under nine programme and work clusters: mining revenues and mineral rent management, building human and institutional capacities, mineral sector governance, links and diversification, and mobilizing mining and infrastructure investment (Figure 2.3). Each cluster is built around a programme goal and its expected accomplishments to be pursued through activities at the national, subregional and continental levels and involving state institutions, the private sector, civil society organizations and international bodies. The AMV has a framework of actions to be implemented over a short term (0–5 years), medium term (5–20 years) and long term (20–50 years). With capacity constraints, some countries may require even longer. However, since 2009, several countries have undertaken policy and legislative reforms in the minerals sector in line with the AMV, with support from the Africa Mineral Development Centre, a joint secretariat to support countries in implementing the AMV. More than 10 African countries are at various stages of designing their Country Mining Vision, a national equivalent of the AMV that takes account of pertinent national and regional issues. The AMV has been adopted into country legislation in Chad and Lesotho, and the process is well under way in 24 other countries, including Ghana, Guinea,

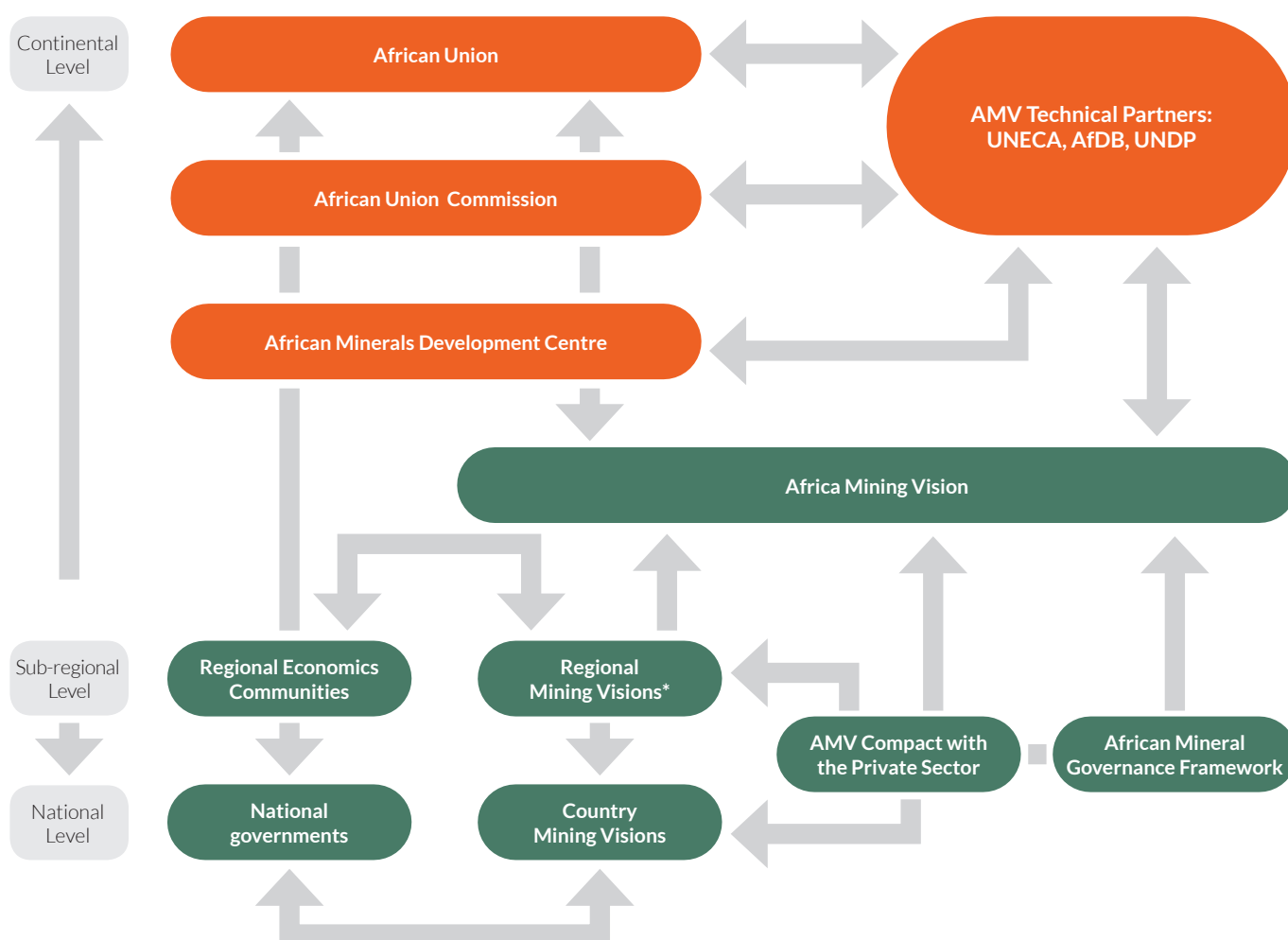
Malawi, Sierra Leone and Zambia, as reported at the African Union Specialized Technical Committee on Trade, Industry and Minerals, which was held in Addis Ababa in May 2016. Additionally, the Africa Mineral Development Centre-led Geological and Mineral Information System will be a key tool for managing geological and mineral information and implementing the AMV.

The action plan assigns an important place to the regional level and to the regional economic communities. Some of these communities have developed mineral resource governance initiatives

intended to help harmonize their member states' mineral regimes and to facilitate the integration of their economies by establishing viable regional mineral value chains.

Like the Natural Resources Charter and EITI, the AMV is strong on governance processes. But the AMV “makes a radical departure from other policy frameworks for the mineral sector”, which are focused on specific issues (Oxfam, 2017, p. 11), by setting out a strategy for building multiple links—forward, horizontal and backward—along the value chain. There is, though, a glaring gap that the

FIGURE 2.3 The African Mining Vision’s implementation architecture



Source: Ushie (2017).

AMV was not designed to cover, unlike the Natural Resources Charter and EITI—governance of oil and gas—which needs to be bridged.

Adopted by Africa's highest political decision-making body, the AMV enjoys a legitimacy that neither the EITI nor Natural Resources Charter has,

but this has not advanced the AMV. The initiatives of external origin enjoy strong financial support. The ECA and member states have been working to build a constituency for the AMV agenda and raise public awareness around it, but there is still considerable work to be done. There is a need to build its financial, organizational and intellectual base.

CONCLUSIONS

Regimes for the good governance of Africa's natural resources remain patchy: that for land is inadequate in most countries and that for the extractive sector is over-focused on process issues. A key weakness is in the allocation of mineral rights on the basis of "first come, first served". The AMV and Natural Resources Charter have called for a shift to open and competitive tendering to maximize value for asset-owning countries, but this requires investment in geological institutions to generate knowledge of the resource endowment. And despite the prominence of transparency and accountability, mechanisms for enforcing these are generally weak, underlining the fact that islands of progress will be hard to build in a sea of governance shortcomings. Closely linked is overall weakness in participation, especially in preparing and developing projects.

Across Africa, natural resource governance regimes and institutions are deficient in how they treat artisanal and small-scale mining operators, chain-saw millers, smallholders and women. Given that African producers are overwhelmingly in these groups, institutional and regulatory frameworks need to be reformed so that economic expansion can boost revenues for African governments rather than foreign investors.

African countries are applying concurrent governance frameworks backed by donor countries and institutions, adding a layer of externally oriented accountability that does not always support mutual reinforcement of domestic institutions and regimes or intra-African cooperation and shared learning. And factors such as commodity price volatility no longer attract concerted international responses.

The natural resource initiatives in governance, such as the AMV, are key developments both on their merits and because they reflect a re-emerging realization of the importance of intra- and inter-state cooperation. Yet 10 years on, the AMV remains far from being the strategic reference point for Africa's mineral governance, which calls for political and financial support of African governments in executing it.

Natural resource governance regimes need to be deepened and made more effective, including management of investments and contracts, processing, beneficiation, environmental and health issues and dispute settlement. Natural resource governance institutions also need their capacity strengthened, including that for planning. Only in these ways can African countries assert their sovereignty over natural resources.

The background is a solid teal color. In the top right corner, there is a large, dark teal shape with a rounded bottom and a thin orange outline. On the left side, there is a large orange shape with a rounded top and a white outline. A white number '3' is positioned inside the white outline of the orange shape.

3

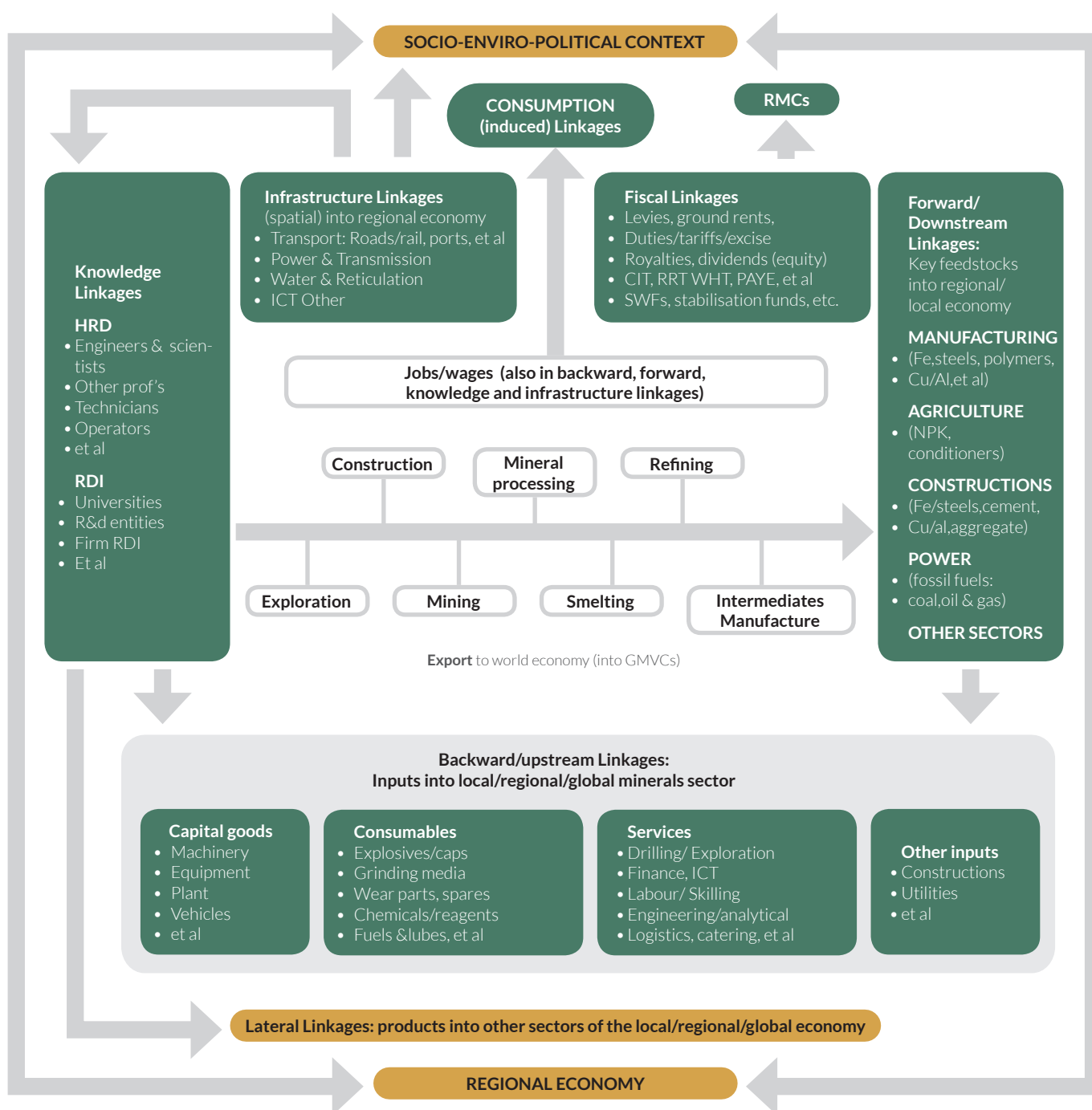
A white rounded rectangle is positioned to the left of the text.

Renewing resource-based
development planning

Planning is vital. Through it, governments set long-term goals, prioritize policies and resource allocation, build national consensus for development, set strategies for diversification and links, craft industrial policies and align the

objectives of public investment and economic transformation. Countries that take planning seriously, such as Ethiopia and Rwanda, are often more successful than others in pursuing transformational development.

FIGURE 3.1 An example of transformational planning



Source: AMDC/SADC Regional Mining Vision - forthcoming.

Comprehensive and inclusive resource-based development planning is a core element of governance, without which natural resource exploitation cannot translate into development gains. Such planning involves an inclusive and comprehensive national strategy that covers all the necessary processes of resource management while factoring in the needs of future generations.

The natural resource endowments of African countries can neither generate sufficient domestic financial resources nor herald meaningful and sustainable structural transformation unless they are converted into, and used as inputs to, other sectors of the economy (Figure 3.1). This requires development planning along the entire natural resource value chain, embodied by strategies to guide value addition, link development and wider economic diversification, through industrial and trade policy instruments.

Although many countries have long-term visions and plans, some remain incomprehensive and poorly linked to sectoral plans, particularly for natural resources. Moreover, many national development plans are not accompanied by substantive budgeting and result matrices, and they lack monitoring and evaluation frameworks. Crucially, most African countries struggle to implement their plans.

3.1

DEVELOPMENT MODELS SINCE INDEPENDENCE

Africa's current economic and political dynamics still reflect its colonial history of primary commodity exploitation with little value added and with perverse development or dependency (Amin 1973; Cheru, 2017; Rodney, 1972). At independence, African countries embarked on nation building and national development, anchored on a planning approach believed to have the potential to bring in economic and social changes (ECA and AUC, 2011). However, the nationalist project and its planning approach apparently made three erroneous assumptions.

The first was the theory of comparative advantage, which encouraged continued exports of unprocessed raw minerals and agricultural products, in the hope of earning foreign exchange for importing manufactured goods. The second was that, as economies grew, market forces would allow the benefits of growth to trickle down to the rest of the population, so there was no need for state action to address income inequalities. The third was the belief that governments would launch social programmes to mitigate the ill effects of initial inequalities brought about by economic growth (Adesina, 2007; Rostow, 1960).

To expand export-led agriculture in line with the theory of comparative advantage, African countries became indebted to finance large infrastructure and related prestige projects, including "white elephants". Some attempts were also made at import-substitution industrialization to kick-start economies and pave the way to industrialization. It was argued that as economies grew, countries could pay off their loans (Cheru, 2017). Yet these policies did not engender structural transformation, despite impressive growth rates immediately after independence, largely reflecting initial conditions.

The commodity export-led development model that African countries had followed began to fail by the mid-1970s, for internal and external reasons (Cheru, 2017; Kararach, 2014). Most countries experienced economic difficulties arising from fluctuations in primary commodity prices. For example, between 1975 and 2005, export prices for Africa, south of the Sahara products were twice as volatile as those for products from East Asia and nearly four times as volatile as those for products from developed countries (Brown and Tiffen, 1992; Cheru, 2017; UNCTAD, 2003). Commodity price volatility was worsened by competition from substitutes reflecting technological innovation, such as synthetics for cotton, aluminium for copper and corn syrup for sugar. Attempts by African countries to offset lower world prices by increasing their share of the world market sparked a ratchet effect that further drove down commodity prices. These problems were aggravated by escalating discriminatory tariffs against African products and by restricted access to industrial-country markets (Kararach, 2014).

The continent's weak development outcomes flattened the independence and democracy dividends. As society demanded better livelihoods and socio-economic conditions, tension developed between citizens and leaders. Poor political governance ensued as unaccountable political elites, often supported by competing Western and Soviet bloc powers, became predatory, corrupt, abusive of office and repressive (Chabal, 1986; Rothchild and Chazan, 1988). Development, which was intended to lift Africans out of poverty, became a tool for accumulating personal wealth by the elites and their supporters (Cheru, 2017). State control of the economy became even more entrenched, alongside limited attention to service delivery and operational efficiency (Kararach, 2016).

African countries have improved their economic growth performance since the early 2000s, but there are concerns about the inclusiveness and sustainability of current growth patterns.

As Africa entered the 1980s, the optimistic mood of the first decade or so of independence was replaced by despair, social disintegration and political instability. Countries were unable to keep their economies productive because of mounting oil bills after the oil price hikes coordinated by the Organization of the Petroleum Exporting Countries in 1973 and 1979, high import content of import-substitution industrialization, low agricultural productivity and growing internal and external debt. Some African governments turned to the International Monetary Fund and the World Bank for more loans and debt restructuring. Africa's foreign exchange problems and mounting debt provided the main reasons for introducing structural adjustment programmes from the early 1980s as a condition for rescheduling the debt. These programmes shifted policies to a type of

package focusing on macroeconomic stabilization, public sector reform and liberalization of markets and trade (Gibbon et al., 1992; Mkandawire, 1994; Olukoshi, 1998).

From the 1980s, debt structures and conditional aid flows became the main instruments through which African development was managed and governance mediated. The dependence on the two Bretton Woods institutions had a deleterious effect on African economies, narrowing the policy space for Africans to manage their economies independently. At the root of the economic crises were political crises that could not be resolved by market-oriented economic reforms. This point was well taken. While donor aid conditions had initially been restricted to economic reforms, restructuring the domestic politics of African countries became a prominent feature of structural adjustment programmes by the early 1990s.

Donors argued that free markets and free elections were essential components in aid programmes and that economic turnaround required an ending to the tyranny of the state, believed to hinder democracy and free markets (Gibbon et al., 1992). In implementing the Washington Consensus, the limited development welfarism of the 1960s and 1970s (including food subsidies, welfare programmes, pan-territorial pricing and indigenization) was eliminated or downgraded, as it was seen as tantamount to corruption and patronage. Under the growing influence of donors in domestic policy space, African governments became less accountable to their citizens (Ake, 1991; Beckman, 1992; Mkandawire, 1994).

Africa's experience with market-oriented economic reform was in stark contrast to the successful newly industrializing countries of East Asia, which had engineered remarkable development outcomes by investing in education, land reform, infrastructure and indigenous technological capacity under the guidance of a strong and capable state (Cheru, 2017; Wade, 2003)—the ultimate lesson, perhaps.

African countries have improved their economic growth performance since the early 2000s, but there are concerns about the inclusiveness and

sustainability of current growth patterns. As in the 1970s, recent growth has not translated into improvements in socio-economic indicators or broad-based economic development (ECA, 2014).

The urgency for Africa's structural transformation must be seen through the prism of the continent in the global division of labour. Over-reliance on primary commodity production and limited value addition has its pitfalls. Structural transformation is expected to end the perverse process of short-term neo-liberal stabilization policies that dominated development policy in Africa. The focus must be more on long-term development, manufacturing and value addition, not on subsistence agriculture (ECA, 2014, 2015). To which end, policy makers have committed to policy planning frameworks, including Agenda 2063 of the African Union, the 2030 Agenda for Sustainable Development and the Africa Mining Vision (AMV) (for the last, see Section 2.3.6 in Chapter 2).

Agenda 2063 builds on experiences of previous plans including the Lagos Plan of Action, the Abuja Treaty and the New Partnership for Africa's Development, as well as other continental and regional plans. It delineates the roles of each stakeholder, including regional economic communities, member states, civil society, the private sector and development partners. The role of the regional economic communities is prominent, as part of broader efforts at structural transformation. The adoption of Agenda 2063 coincided with discussions on the post-2015 development agenda and thus the Common African Position, which helped cohere themes and strategies of African countries.

3.2

DEVELOPMENT PLANS: CONCEPT AND APPLICATION

Development planning provides “a systematic approach to identifying, articulating, prioritizing, and satisfying the economic and social needs

and aspirations of a country within a given (often limited) resource envelope” (ECA, 2015, p. 3). South-east Asian economies established “legitimate, credible, accountable and capable systems of governance operationalized within a development planning framework” (ECA, 2015, p. 9). Their economic success is ascribed in part to development planning.

It is crucial to systematize Africa's development planning, especially as the continent executes Agenda 2063 and the 2030 Agenda. Good natural resource governance begins with the development of a shared national strategy or vision, with clear and realistic goals and timelines of achievement (UN, 2013).

Africa's experience with development planning back to before independence has been bumpy (as just seen). Through the post-independence phases of planning (or lack of), the natural resource sector remained largely under-exploited—as it continued to service the raw material needs of the former colonizers—or was plundered. Political and institutional factors, including weak administrative capacity and financing, have impaired implementation. More than half a century after independence, it is no surprise that many African countries are still at the discovery and exploration stages of their resource potential, pointing directly to the planning gap.

Development planning has regained currency in Africa in the last two decades. Planning is at two key levels: long-term plans that cover 10–30 years, often called visions, and medium-term plans drawn from them, focusing on perhaps 5–7 years, and their detailed plans and interventions.

A rising number of African countries are adopting development plans that move from a narrow focus on poverty eradication to broader long-term visions, accompanied by sectoral plans, including natural resources. Examples include Ethiopia's Vision 2020 and its second Growth and Transformation Plan and Tanzania's Vision 2030 and its 10-year implementation plan. Challenges that have plagued planning since independence remain, though, including poor design, over-ambitious targets, weak institutional capacities, exogenous shocks and political instability.

3.3

RESOURCE-BASED DEVELOPMENT PLANNING

Planning is vital for natural resource governance because many African countries are rich in resources but have not achieved sustainable development and better livelihoods for many and because extractive resources are susceptible to commodity price fluctuations. Without sound planning—and solid execution—the potential of resource wealth to transform low-income countries remains just that: potential. African countries' natural resource endowments cannot bring about sustainable transformation unless they are used as inputs to other sectors—attainable through strategies for adding value, setting critical links with other sectors and diversifying the economy's structure, including through industrial and trade policies.

Most plans for exploiting natural resources reflect an intricate decision chain (Figure 3.2) over a long period, with multiple actors. The period of experimentation on choice of development trajectory offers countries opportunities to integrate the management of natural resources within their development plans.

However, the long-term perspective may go against short-term political gains. Further, information has to be collected and analysed; legal frameworks and standards of operation laid out; and capacity, with other resources, improved. If well implemented, resource-based development

planning can be a driver of sustainable development. Absorbing best practices thus remains an imperative for policy makers.

Countries rich in natural resources tend to cover more specific objectives and strategies on how to harness resource wealth, and more recent plans tend to cover more issues on natural resources than older plans do. But many sectoral plans lack clear links to national objectives and are often developed and implemented in silos. Most plans see good governance as a cross-cutting issue, with strategic interventions containing elements of institutional strengthening and stakeholder participation, including the private sector, in natural resources.

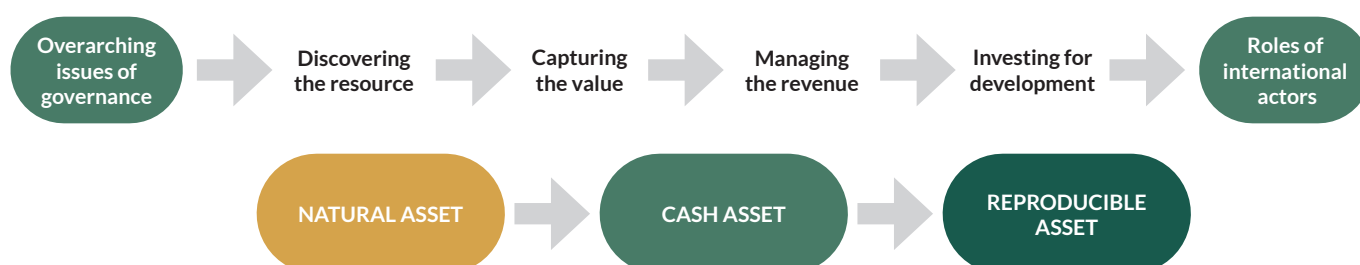
Institutionally, national plans generally fall to national planning agencies, usually under ministries of finance, planning and economic development. Some countries have designated departments in their ministry for natural resource planning, with sector-tailored strategies (Box 3.1).

3.4

MODELLING NATURAL RESOURCE VALUE CHAINS

Natural resource value chains generally comprise a series of links that resource-dependent countries must take to transform resource rents into development wealth (Mayorga-Alba, 2009). The framework is not strictly sequential because downstream decisions

FIGURE 3.2 The decision chain



Source: ECA staff.

BOX 3.1

Examples of planning bodies in three African countries

In Cameroon the Ministry of Economy, Planning and Development coordinates development planning. It has a regional delegation in the country's 10 regions and departmental delegations in the 58 country's divisions. The ministry does not have a unit dedicated to natural resources, as its activities would overlap with those of other ministries, including the Ministry of Mines, Industry and Technological Development and the Ministry of Forestry. The Ministry of Finance is responsible for estimating values and appraising taxes on natural resources.

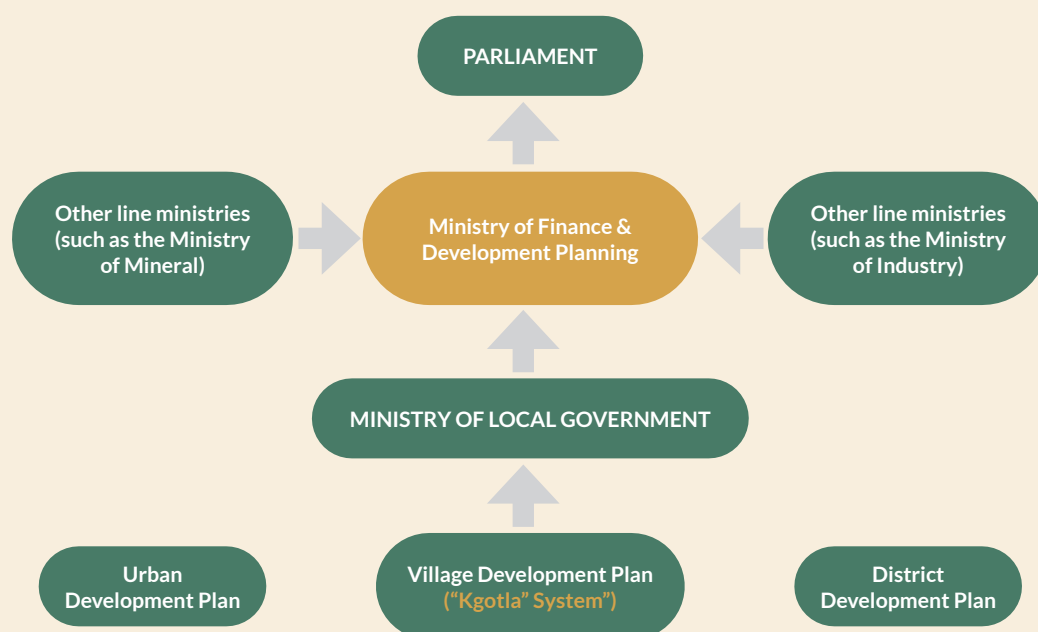
Several autonomous bodies in Nigeria are responsible for planning—reflecting the country's federal system—with the Ministry of Budget and National Planning at the apex. The ministry's mandate is to determine and advise the federal government on national development and management of the economy, in addition to submitting the national budget. Units coordinate sectoral plans, including those on natural resources, under the ministry.

In Botswana the Ministry of Finance and Development Planning coordinates plans through an inter-ministerial thematic group; the plans are then debated and approved by Parliament. National development plans are for five years, visions are for 20 years. National Development Plan 11 will be reviewed every three years; finite resources propelled continuation of the planning imperative, which had been initiated when the country was depending on donors. Although the Ministry of Finance and Development Planning does not have a dedicated unit for natural resources, every sectoral ministry has a planning unit, to which the Ministry of Finance and Development Planning seconds a planning officer. The planning process takes 1.5–2 years. The Ministry of Finance and Development Planning invites all ministries to submit proposals. A reference group at the Ministry of Finance and Development Planning—with representatives of government, the private sector, nongovernmental organizations, trade unions, women, the environment, local authorities, think tanks and others—reviews the draft plan. Every ministry submits proposals, which form the basis for the Ministry of Finance and Development Planning to reconcile and prioritize.

Botswana's "bottom-up approach" to development planning is a best practice, enhancing inclusiveness and participation, with planning starting at the village level through to the centre (see box figure). A key feature is the Kgotla system,¹ a grassroots' consultative and participatory mechanism.

1 <http://yourbotswana.com/index.php/2017/01/05/botswanas-kgotla-system/>.

BOX FIGURE Botswana's bottom-up planning process



Source: ECA illustration with data from national-level consultations

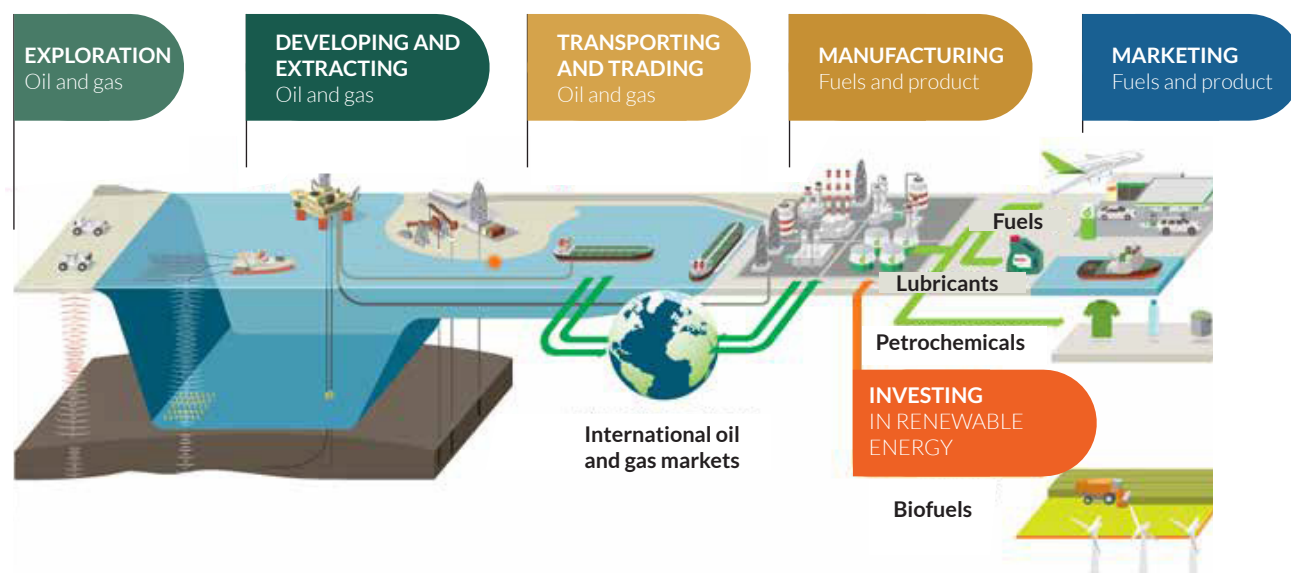
in any given period will inevitably have an impact on upstream decisions on extraction in the next period. A systematic political economy framework helps inform the prioritizing and sequencing of measures, emphasizing approaches that are technically sound and compatible with given country contexts.

Different models for these value chains exist, including that by the AMV, the World Bank's Extractives Industry Value Chain and the value chain of the Natural Resource Governance Institute (Figure 3.3 and Figure 3.4). The institute's framework articulates 12 precepts along three levels (domestic, sectoral and global), with questions on norms and good practices. For example, precept 4 queries tax strategies, and precept 11 queries the role of multinational companies (for long-term planning in a given country). This framework embodies the fact that countries are at different levels of any value chain, have varied institutional capacities and have disparate approaches to developing and exploiting their natural resources.

The planning focus and priorities of countries vary along countries' value chains. Countries that have recently discovered natural resources focus more on initiating the policy, legal and institutional framework, while those at mature stages concentrate on value addition, beneficiation, link establishment and diversification. Similarly, countries where the natural resource sector is a major source of national revenue tend to focus more on upstream activities (see Botswana, Cameroon, Nigeria and Tanzania in the annex).

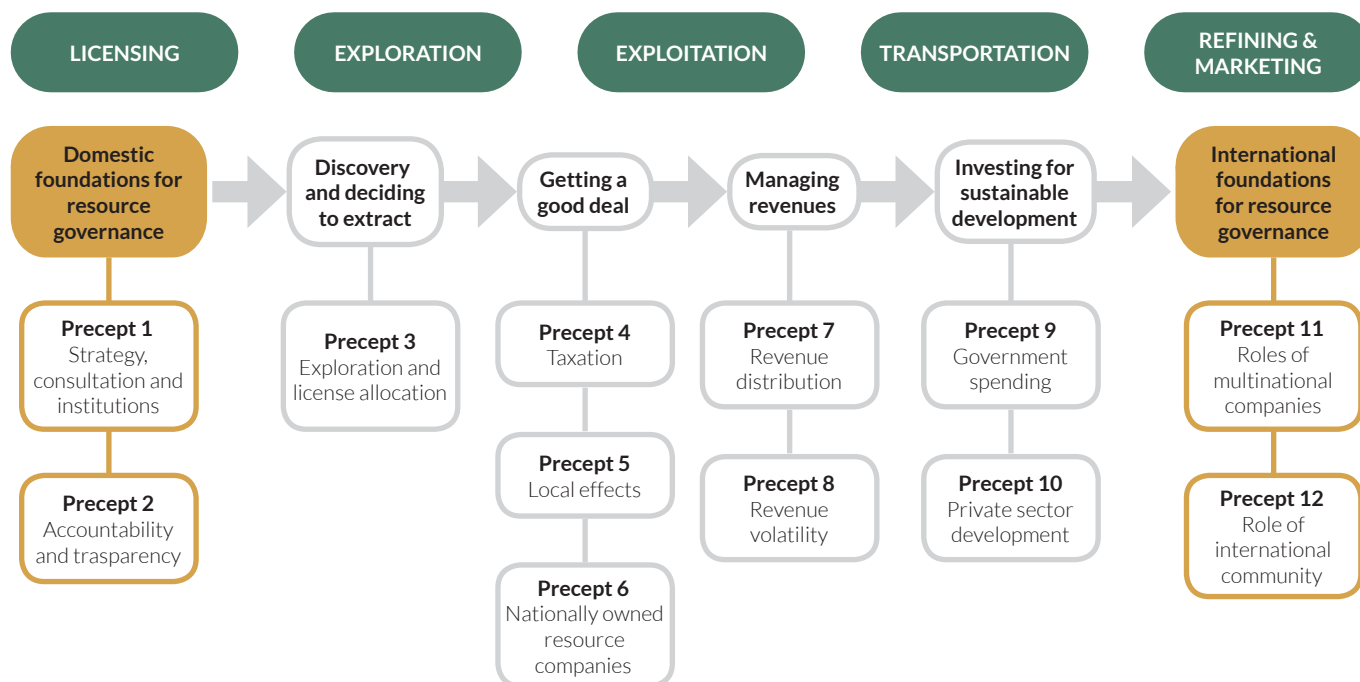
The five main stages of the extractive value chain (Figure 3.5) need planning in order to encompass a range of actors. Specific strategies such as local content targets or expansion of local suppliers' production competences should be captured in the framework. Governments should identify and align related sector policies, including import duty exemptions for local and foreign companies, to promote backward links (Mjimba, 2011).

FIGURE 3.3 Oil value chain



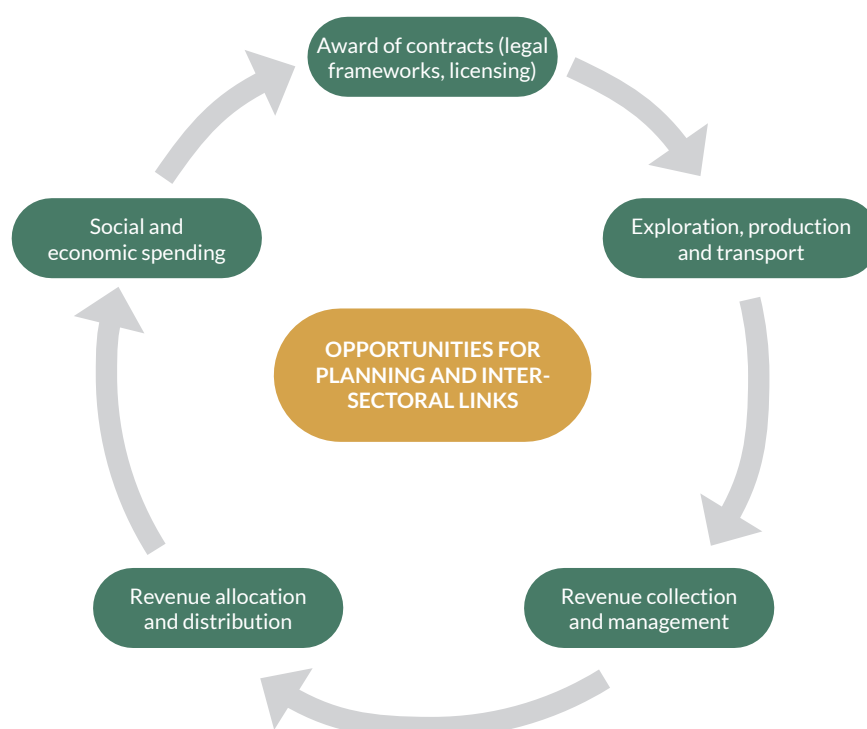
Source: NRGi (2015).

FIGURE 3.4 Value chain for minerals and metals along the precepts



Source: Adapted from NRGi (2015) and ECA and AMDC (2017).

FIGURE 3.5 Planning along the extractive value chain



Source: ECA staff.

Award of contracts (legal framework and licensing)

What happens in a country at the start of the chain before contracts are awarded determines what happens to the end of the value chain, and beyond, such as establishing links and leveraging opportunities for diversification for capturing the subsequent interventions and benefits. As governments take the decision to extract resources, they need to plan and build capabilities, particularly in contract preparation and negotiation. The African Minerals Development Centre’s work on contracts argues that the outcomes of large projects will depend mainly on how well stakeholders—particularly host governments—negotiate their position by trying to shift, share or mitigate risks. It is crucial for them to use the skills and techniques of effective negotiations and to ensure that their negotiators have the capabilities for this. Governments that take on the wrong, or a surfeit, of risks undermine the chances of project success.

Several countries recognize that having a sound legal, policy and institutional framework is a prerequisite for harnessing natural resource wealth. However, there are differences: some country plans seek to initiate or start developing these frameworks; others aim simply at strengthening, reviewing or amending existing laws, policies and institutions to address emerging issues, especially where the extractive industry accounts for a large share of the economy. The objective of South Africa’s National Development Plan 2030, for instance, is to amend the Minerals and Petroleum Resource Development Act (2002) to ensure a predictable, competitive and stable mining regulatory framework. Angola’s National Development Programme 2013–2017 focused on strengthening the role of Sangola—the national oil company—in oil and gas exploitation.

Some countries have written new laws or policies. Rwanda’s Economic Development and Poverty Reduction Strategy 2013–2018 overhauls the mining sector through new regulations and

systems. Libya's Vision 2020 implements a new petroleum law setting new conditions for awarding production-sharing agreements.

Exploration, production and transport

There is a shift to more open and transparent licensing and contract awarding, although implementation remains a challenge. Libya's Vision 2020 promotes open and competitive rules for exploration and production rights; it further sets conditions on social and environmental impact assessment prior to awarding contracts. Angola's National Development Programme 2013–2017 targeted controlled exploration of oil, which is a unique intervention among plans.

Another important strategy at the exploration stage is that investing in research and data. Tanzania's National Development Plan 2016/17–2020/21 aims to set up a coal databank and undertake a

sampling and analysis of coal. Uganda's National Development Plan II 2015/16–2019/20 contains targets to develop and maintain an integrated national oil and gas resource databank and to invest more in surveys and exploration, reflecting discoveries. Nigeria's Transformation Agenda 2011–2015 envisaged further mechanisms for reliable geoscience data to support exploration.

Namibia's Fourth National Development Plan 2012/13–2016/17 showed that the value chain informed planning for output. It focused on creating value in upstream and downstream activities. The plan stressed value addition and beneficiation of diamonds. Sierra Leone's Strategy Paper 2013–2018 aimed at following international best practice in managing natural resources by applying, particularly, the Natural Resources Charter and the AMV, to which the country's extractive sector has been effectively benchmarked or/and aligned.

BOX 3.2

The importance of infrastructure

Planning for infrastructure is central at the discovery, exploration, production and transport stages. Infrastructure, including rail, roads and telecommunications, strengthens links and enhances growth of supplier and resource-processing activities, increasing economies of scope for further infrastructure expansion (AfDB, OECD, UNDP and ECA, 2013).

Some African subregions have drawn up plans for joint infrastructure development. In East Africa a bilateral agreement between Tanzania and Uganda to build an oil pipeline is a key milestone (Mbabazi, 2017).¹ Crude oil from Uganda's oil-rich region will be exported through Port Tanga in Tanzania.

Regional infrastructure development, including under the Pan-African Infrastructure Development Programme, remains vital. It not only provides opportunities for developing regional value chains in natural resources, but also helps in pooling resources for financing projects. Additionally, resource-rich land-locked countries, such as Central African Republic, Chad and Uganda, rely on regional infrastructure and value chains.

¹ Critics of the pipeline argue that it does not encourage regional value chains because it prioritizes and perpetuates transporting and exporting crude oil without adding value.

Zambia's Vision 2030 well captures diversification efforts, aiming to lower dependence on copper mining by promoting links to other sectors. The government plans to promote non-copper exports and attract foreign direct investment to non-mining sectors. The second phase of Equatorial Guinea's National Economic Development Plan: Horizon 2020 focuses on economic diversification, targeting fisheries, agriculture, tourism and finance.

Some plans target developing and expanding transport infrastructure for hydrocarbons and minerals. Ghana's Medium-Term National Development Policy Framework II 2014–2017 targets completing the construction of the gas-processing plant and related pipelines and of a new deep-sea port with its own oil and gas service terminal, shore base and fabrication centre. The natural resource sector's need for infrastructure cannot be overemphasized (Box 3.2).

For planning, this stage of the value chain is perhaps the most complicated, owing to the many actors and interests involved, which can sometimes be in conflict and therefore need to be managed. Because the private sector is critical at this stage, plans to establish an environment for enhancing its role in facilitating growth links are key. These plans should be backed up by measures to support technological capabilities, skills development and entry into marketing and distribution networks. Government measures to reduce the cost of manufacturing and inputs and to improve infrastructure are vital for lifting private sector performance.

Revenue collection and management

Most countries' plans focus on strengthening the fiscal framework or developing separate tax laws for mining or hydrocarbons. But few plans provide specific quantitative revenue targets for the extractive sector. In Sierra Leone's Third Generation Poverty Reduction Strategy Paper 2013–2018, a portion of resource revenues from natural resources is "ring-fenced in a special fund" to promote inclusive economic development.

Revenue allocation and distribution

With new national development plans, some countries have introduced changes so that local communities access some of the revenue. For examples, in Libya's Vision 2020 a new petroleum law is to be introduced to create a more transparent, fair and efficiently managed oil and gas sector that addresses revenue sharing between central and local governments. In Mozambique's Vision 2025 the government plans to enforce legislation to ensure that local communities and areas where natural resources are exploited receive a portion of the revenue.

Social and economic spending

Almost all development plans address sustainable development, with the difference lying in the targets. As a leading coal producer, South Africa has a target to reduce carbon emissions in its National Development Plan 2030. Kenya's plan is to put in place safeguards to protect the environment and to avoid risks usually associated with huge inflows of resource-based external earnings. Similarly, Ghana's medium-term strategies focus on leveraging opportunities offered by the oil and gas industry for job creation, especially for younger workers.

3.5

DIVERSIFICATION, LINKS AND STRUCTURAL TRANSFORMATION

Strategies for diversifying the economy and for generating links from the extractive to other sectors are necessary for a resource-rich country to industrialize, create jobs and sustain revenue. They can be along resource value chains or outside them. Such diversification and links add more value through beneficiation than mining itself.¹⁶

¹⁶ Needless to say, infrastructure and human development are foundations for diversification and development for other sectors (Callen et al., 2014).

A resource-based strategy needs to develop labour-intensive upstream sectors and go further downstream (see Box 3.4), beyond capital-intensive intermediate goods to labour-intensive fabrication, which is often stunted by the widespread practice of monopoly pricing of intermediate industrial stocks. Regional and national strategies would go through similar phases of industrialization, with decreasing importance of the resource comparative advantage and increasing significance of skills-based competitive advantage.

Given the odds between extractive-led growth, climate change mitigation, the imperatives for green growth and the need to reconsider

effects of commodity price volatility, a diversified economy is the best way to mitigate the economic vulnerabilities of dependence on a single—primary—product to a volatile export market (Callen et al., 2014) (Box 3.3).

It has been argued that “a developing country can change its industrial and economic structure by changing its endowment structure” (Lin, 2011, p. 201), by following the comparative advantage determined by the endowment structure so as to develop industry. Natural resources are Africa’s comparative advantage, meaning that the continent’s structural transformation will involve diversifying and industrializing through building cross-sectoral links.

BOX 3.3

Product diversification — elements of the debate

Diversification is still a debatable concept given data gaps in variables—especially in oil-exporting countries—and variation in country contexts (Ross, 2017). It can be defined as “the shift to a more varied production structure, involving the introduction of new or expansion of pre-existing products, including higher quality products” (IMF, 2014, p. 10). Current and “standard measures of export diversification account for three factors: the number of products exported, the number of export markets, and the relative value of each product” (Ross, 2017, p. 2).

Given that diversification includes an increase in the number of goods produced or exported, and upgraded quality as measured by their unit value (Papageorgiou et al., 2013), this shift has the potential to complement private sector development, and can be a vehicle for economies to industrialize and integrate into regional value chains.

Papageorgiou and Spatafora (2012) have documented a strong association between economic diversification and sustained growth for low- and middle-income countries. Higher GDP per capita and lower volatility are strongly associated with diversification of output and exports in these two country groups. Similarly, diversification in output and exports, especially for natural resource-rich countries, is closely linked.

However, diversification is cumbersome and difficult (OECD and UN, 2011) and has to overcome obstacles including over-specialization, economic volatility (tied to over-reliance on hydrocarbon or mineral revenue), the corroding effect that such revenue has on governance and institutions, and the risks that oil revenues lead to overvalued exchange rates (“Dutch disease”). Thus success in diversification depends on implementing appropriate policies well ahead of the decline in natural resource revenue.

Source: Compiled by ECA staff..

The experience of resource-rich countries such as Brazil, Finland, Malaysia, Norway and Venezuela shows that natural resource sectors can foster diversification through links to other sectors of the economy, when guided by sound plans to guide link development.

African countries are adding value to their commodities and developing local backward and forward links (defined in Box 3.4 under “Production links”). The depth of the links varies by country, and value addition remains modest, mainly because of country- or industry-specific constraints that require industrial policies. When well implemented, extractive projects have the potential to lift and upgrade the rest of the economy, not only through production links, but also through fiscal and consumption ones (Hirschman, 1977). In theory, these projects can be the bedrock of industrialization, especially through their contribution to developing infant manufacturing industries (ECA, 2016)—but rarely are in Africa.

In the mineral sector the literature on diversification and industrialization through links

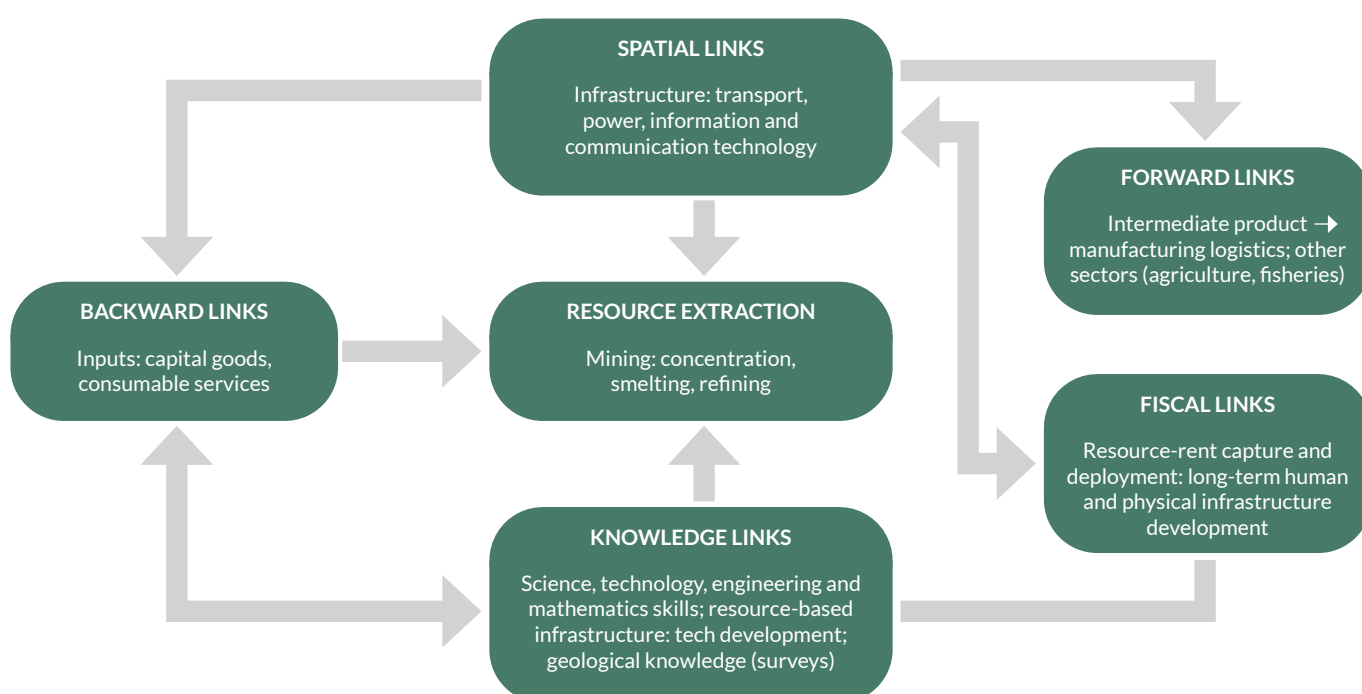
recognizes the need to move beyond sectoral and silo approaches to cross-sectoral interventions to implement the responses for resource-driven transformation (AfDB, OECD, UNDP and ECA, 2013; ECA, 2013; Pedro, 2017). The AMV takes this approach further (Figure 3.6).

According to the AMV, resource-rich countries can industrialize through a range of links, including fiscal links, where resource rents are reinvested into long-term human, social and physical infrastructure to replace the resource capital lost with new capital that can outlive mining.

The direct mineral links include upstream and downstream value addition (mineral beneficiation), knowledge links (science, technology, engineering and mathematics and skills and research development and innovation) and spatial links (mineral resource-based infrastructure) (AMDC, 2014).

Upstream links are the first to arise in a mineral project and the first to wane when it closes. The value of the mineral (by weight) relative to its original value generally rises at each stage of

FIGURE 3.6 Africa Mining Vision scheme of links in the minerals sector



Source: Adapted from AMDC (2014).

BOX 3.4

Types of links

Production links are forward (downstream) and backward (upstream) links. Forward links refer to processing and transforming commodities into manufacturing products. Forward links include value addition by processing and refining as well as using minerals as inputs for local industries and can be expanded to include modern management techniques and managerial capacity feeding into the rest of the economy. Backward links refer to inputs (employment, capital and material) used in commodity production.

Another production category covers horizontal links considered a complex set type made of suppliers and users in the value chain who develop capabilities to feed into other industrial and service chains. These are also sometimes known as side-stream links, which arise from the need for other industries such as stock markets, financial services, utilities, logistics and communication.

Other links include spatial links relating to the use of an inclusive, multi-model and multi-functional infrastructure corridor. These are important to open the extractive industries and leverage opportunities for investing in resource-based infrastructure. The knowledge links involve skills development, research and development, and technology spillovers derived from the extractive sector and then market links at the national, regional and international levels.

Fiscal links refer to the revenue generated for the owner of the resource, in most cases, the state. They relate to the resource rents that the government can collect from the commodity sector in the form of corporate taxes, royalties and taxes on employees' incomes. Fiscal revenues can be used to promote industrial development in other sectors of the economy.

Consumption links are associated with demand for output produced by other sectors arising from the income earned or expenditure incurred in the extractive sector. The demand generated by employees in the sector has the potential to provide a major spur to industrial production through spending on products and services.

Sources: AMDC (2014); ECA (2013).

downstream links. As one moves further down the mineral value chain, the influence of inputs such as skills and technology on upstream and downstream links increases (AMDC, 2014).

It bears repeating that the development of upstream, horizontal and downstream links is critical for economic diversification. Given the multi-sectoral nature of building links, the process requires strategic government support for the private sector to be competitive globally. Among the critical success factors are price, quality,

lead times, dynamic capabilities and compliance with technical, private, health and environmental standards. Link development is thus cumulative and requires continuous investment. For the private sector to engage with link development, good economic governance (including regulatory quality and the rule of law) is a prerequisite.

Because firms that control regional and global value chains may not have incentives to promote links, governments can intervene along the chains, so that domestic firms can provide local content.

The importance of building inter-sectoral links with the natural resource sector makes a good case for resource-based development planning in exploiting natural resources, especially as they have largely failed to act as an engine of development in Africa (Box 3.5).

Particularly for Africa, backward (upstream) links are key to driving resource-based industrialization because forward links will be more challenging given their capital and knowledge intensity (Buur et al., 2013). In South Africa backward links have been important to industrial growth for more than a century through clustering of firms involved in metal

products, machinery and equipment, electrical equipment, and construction goods and services (Walker, 2005). Ghana shows increasing evidence of localized, and even locally owned, productive activity servicing and supplying the gold-mining industry (Bloch and Owusu, 2011).

Backward links also provide scope to develop local content policies and strategies in order to stimulate use of local inputs or factors of production. In 2017, in preparation for oil production, Uganda's Petroleum Authority and the petroleum sector regulator launched the National Supplier Database, which will serve as a one-stop centre for local and international oil and gas suppliers (Uganda Business News, 2017).

BOX 3.5

Why are extractive projects poor team players?

The main argument for the failure of extractive projects to drive economy-wide development is the enclave nature of these projects (Stevens et al., 2015).

From Hirschman's concept of technological strangeness, extractive projects tend to be relatively high-tech and thus require sophisticated and complex equipment and operations. If such a project is implemented in a developing environment, it is likely to be isolated from the local economy, especially small and medium-sized enterprises. There may not be companies on hand to service the project or skilled professionals to be employed by it.

Further, the production of crude oil, for example, has limited opportunities for value-added industrial use because of the unfavourable economics associated with refining and the downstream segment. These drawbacks are made worse because fiscal links between extractives and the rest of the economy are "point revenues", which accrue to the government—not taxes from a wide range of revenue-generating activities. Thus only a few people decide how those resources are to be spent and have responsibility for spending them. This is unlike peasant agriculture, where fiscal links are highly dispersed across producers and the spending of revenues generated by the sector depends on many individual decisions and interests.

Finally, one needs to look at how and at "what speed the sector developed as well as at the resources produced" (Stevens et al., 2015, p. 32). There is a strong tendency among countries that discover resources to develop projects as quickly as possible and aim for rapid depletion. Pressure to do so comes from two sources, the host government and the operating companies. However, developing projects in this way poses several problems, especially for developing countries with limited institutional and regulatory capacity—making the case for development planning even stronger.

Source: Compiled by ECA staff.

The literature demonstrates that a focus on the forward (downstream) industries, particularly in the extractive sector, is not a viable strategy for many African countries (Asche et al., 2012). This is because the intermediate inputs required for the advanced sector are either too costly or hard to absorb, owing to prior technological gaps in Africa's resource-dependent countries.

Indonesia, Malaysia and Mexico are examples of diversification among extractive-producing countries, but in each, diversification accelerated after resource revenues began to decline—and

mainly because of extensive incentives for high-productivity industrial activity, technological transfer and skills development. They also adopted comprehensive energy policies to help guide fossil-fuel use in their economies. In contrast, diversification in the Gulf Cooperation Council countries—Bahrain, Kuwait, Oman, Qatar, Saudi Arabia and the United Arab Emirates—is said to have failed because their GDP composition is still highly skewed towards oil as the main source of export and fiscal revenues. Box 3.6 encapsulates the experiences of two African countries.

BOX 3.6

Diversification in Botswana and Mauritius

Botswana and Mauritius showcase disparate experiences with diversification through development planning. The government of Botswana has recognized the need to diversify from diamonds, as reflected in its National Development Plan 11. It already set a short-, medium- and long-term economic diversification drive and strategy (2011–2016), beyond the diamond beneficiation activities and Diamond Hub, launched in 2008 under the aegis of National Development Plan 9. Yet despite strategies for the leather, dairy, textile and clothing industries in 2012/13,¹ Botswana's economic diversification drive has not been successful, with manufacturing remaining stagnant and economic diversification sluggish (Dzimiri, 2015). National Development Plan 11 seeks further efforts to diversify. Structural transformation in Botswana remains weak, as mirrored by sectoral contribution to GDP, where mining and government services still dominate economic activity, mainly because it has not established the necessary links.

Mauritius, in contrast has achieved structural transformation—but over a far longer period: over two decades. There have been profound changes in the sectoral composition of the economy: between 1976 and 2010 the share of primary sector production declined from 23 per cent of GDP to 6 per cent, the secondary sector increased from 23 per cent to 28 per cent and the tertiary sector increased from a little over 50 per cent to nearly 70 per cent (Zafar, 2011, cited in Shumuye, 2015). Diversification was made possible by a combination of strong institutions, an autonomous and professional bureaucracy, visionary leadership, political stability, international partnerships and engagement of the private sector at various levels of planning and implementation of plans.

1 Matambo (2014).

WHY GOVERNANCE MATTERS FOR LONG-TERM SUSTAINABILITY

Sustainability is related to scarcity and allocation of usually finite natural resources, human welfare and intergenerational equity. Sustainability ensures opportunities for a desirable quality of life for future and present generations, including ecological and social desirabilities (Kant and Berry, 2005). Aspirations to structural transformation in African countries need to be underpinned by the sustainability imperative.

Concerns over the environmental and ecological impacts of natural resource extraction and exploitation remain prominent (Le Billon, 2012; Mehta, 2010). Ecological and environmental protection are for some the primary means of guaranteeing the future of humanity (Duffy, 2014; Homer-Dixon, 2010; Martin, 2013). Some of Africa's main mineral exports, including oil and coal, are among the most ecologically and environmentally unfriendly natural resources, for which alternatives are being sought.

The growing shift towards greener sources of energy points to a future reduction in demand and consumption of fossil-fuel resources. A global transition to 100 per cent renewable energy is feasible. The cost of renewables is also forecast to continue falling (REN21, 2017). Natural resource-rich African countries need therefore to integrate the exploitation and management of their natural resources to ensure environmental and economic sustainability.

Current patterns of natural resource management, which prioritize exports of unprocessed commodities, are also unsustainable from a financial standpoint, especially given their vulnerability to

global commodity price volatility (see Section 1.2.2 in Chapter 1). African countries need to prioritize their diversification and value addition, not only to reduce economic exposure to booms and busts, but also to attain sustainable economic growth.

The chances of natural resource extraction deteriorating governance and undermining institutions are well known (Atkinson and Hamilton, 2003; Auty, 2001; Leite and Weidmann, 2002; Katsaiti and Anshasy, 2013; Ross, 2001; Torres et al., 2013; and see Section 2.1.1 in Chapter 2). The literature argues that high dependence on natural resource wealth checks efforts to mobilize other forms of government revenue, including tax collection, leading to a decline in the government's institutional capacity and an erosion of the core tax-accountability link between state and society—a critical factor in sustaining fiscal legitimacy (AfDB, OECD, UNDP and ECA, 2010; European Parliament, 2014). Diversification and support to less endowed regions would accelerate the building of high-quality institutions.

Many resource-rich African countries are struggling to establish the institutions needed for sustainably managing natural resources and to ensure transparency, participation and accountability. The Resource Governance Index—which measures the quality of governance in the oil, gas and mineral sectors of 81 countries, including 33 African countries—finds that the quality of governance is one of the explanatory factors for why resource-rich countries have grown more slowly than non-resource rich ones (NRGI, 2017). Most resource-endowed African countries also lack data on their endowments, including on volumes extracted and exported. Only 20 per cent of African Organisation of English-speaking Supreme Audit Institutions countries carried out audits of extractive industries (ECA, 2017). The economies of resource-rich countries have grown more slowly than the economies of resource-poor countries.

CONCLUSIONS

African countries' inability to transform their economies, despite having huge natural resource endowments, continues to baffle many. Although the continent has seen periods of impressive growth, these episodes—because of their fairly short lengths, lack of long-term resource-based development planning by governments and governance weaknesses (including the state's inability to collect natural resource taxes)—have failed to induce economies to diversify.

This is where long-term plans for natural resource governance come in. Many African countries need to adopt more-comprehensive and more-inclusive approaches, including for institutions and administration—a priority area and a prerequisite for initiating the slow process of structural change and economic transformation. Because such planning has numerous vulnerabilities, including the skewed nature of Africa's integration to the global economy, it needs to be strengthened and applied along the entire natural resource value chain, just as natural resource strategies must be fully integrated into long-term national development plans.

For these reasons, national planning bodies need to be allowed to set priorities and to create programming units at the level of operating government entities; to build consensus on the core responsibilities of the planning agency; to agree on the appropriate distribution of planning functions, including responsibility for annual operational plans, relations to the budget office and statistical agency, responsibility for development projects and programmes, and coordination of plan implementation; and to secure consensus on the hierarchical position of the planning agency, with constitutional and legislative safeguards to ensure efficiency (ECA and AUC, 2011). Such reforms will be vital for domestic revenue mobilization and will help invigorate public financial management, curb illicit financial flows and foster transparency in how natural resources are managed.

Annex

PROVISIONS FOR NATURAL RESOURCES ALONG THE VALUE CHAIN IN 21 COUNTRIES' NATIONAL DEVELOPMENT PLANS

Country	Hard commodity	Focus of provisions on the value chain
Angola	Oil	Exploration and production, sustainable development (National Development Program 2013–2017)
Benin	Minerals	Sector organization and institutions (Growth and Poverty Reduction Strategy 2011–2015)
Botswana	Minerals	Revenue management and allocation, mineral beneficiation and value addition (National Development Plan April 2017–March 2023)
Burkina Faso	Minerals	Policy legislation and regulation, monitoring and revenue management (Strategy for Accelerated Growth and Sustainable Development 2011–2015)
Cameroon	Oil	Exploration and production, and value addition (Vision 2035); sector organization and institutions, and revenue management (Growth and Employment Strategy Paper 2010–2020)
Central Africa Republic	Minerals	Policy and legislation, sector organization and institutions, and revenue management (Poverty Reduction Strategy Paper 2011–2015).
Democratic Rep. of Congo	Oil and minerals	Sector organization and institutions, policy and legislation, licensing, exploration and sustainable development (Growth and Poverty Reduction Strategy Paper II 2011–2015)
Congo, Rep.	Oil and minerals	Policy and legislation, exploration and production, value addition, sector organization and institutions, and sustainable development (National Development Plan 2012–2016)
Ethiopia	Minerals	Policy, legislation and regulation, exploration, production and value addition, and sustainable development (Growth and Transformation Plan II 2015/16–2019/20)
Ghana	Oil	Policy, legislation and regulation, sector organization and institutions, exploration and production, revenue management and sustainable development (Medium-term National Development Policy Framework II 2014–2017)
Kenya	Oil	Policy, legal and institutional framework, revenue management and distribution, and sustainable exploitation (Vision 2030); sector organization and institutions, exploration and production, and revenue management (Second Medium Term Plan 2013–2017)
Lesotho	Minerals	Policy, legislation and regulation, exploration, production and value addition (National Strategic Development Plan 2012/13–2016/17)
Liberia	Minerals	Regulation and monitoring of operations, social economic spending and sustainable exploitation (Agenda for Transformation—Liberia Rising 2030)
Libya	Oil	Updated policy, legislation and regulations, re-evaluation of award of contracts and licences, exploration and production, revenue management and allocation, social economic spending and sustainable management (Libya 2020 Vision)
Namibia	Minerals	Mineral development and beneficiation, and sustainable management (4th National Development Plan 2012/13–2016/17)
Nigeria	Oil	Production and diversification (Vision 2020); sustainable exploration and exploitation, sector organization and institutions, and regulation and monitoring of operations (Transformation Agenda 2012–2015)
Rwanda	Minerals	New policy, legislation and regulations (Economic Development and Poverty Reduction Strategy 2013–2018)
South Africa	Minerals	Amendments to the legal and regulatory framework, production and revenue collection (National Development Plan 2030)
Tanzania	Minerals	Legal framework, sector institutions, revenue collection, production and value addition (National Five-year Development Plan 2016/17–2020/21)
Uganda	Oil and minerals	Production and value addition, sector organization and institutions (Vision 2040); oil and gas: exploration and production, establishment and support of sector institutions, and monitoring and regulation of operations; minerals: policy and legislation, and regulation and monitoring of operations (National Development Plan II 2015/16–2019/20)
Zambia	Minerals	Diversification, regulation and monitoring of operations, revenue collection and management (Vision 2030); review of mining legislation and policies, sustainable production, and revenue collection (Sixth National Development Plan 2013–2016)

Source: ECA staff based on country consultations and reviews of national development plans.

The background is a solid orange color. In the top right corner, there is a blue U-shaped graphic element. On the left side, there is a large blue vertical shape with a white rounded rectangle cutout in the middle. A white horizontal line with rounded ends extends from the left edge, passing behind the white cutout and ending in a semi-circle on the right. The number '4' is centered within this white semi-circle.

4

Mobilizing domestic
revenue

Domestic revenue mobilization is widely accepted as the most sustainable path to economic development, to which end, many African countries need to improve their ability to raise and manage tax revenue and lift the tax base. This is very critical given that their development outcomes from natural resource endowments have been mixed at best. They need to prioritize the agenda for maximizing these endowments' impacts, particularly to improve their citizens' well-being. Governments should strengthen fiscal policy and equitable public spending and reinforce moves towards greater transparency and accountability in natural resource governance. Governments also need to encourage deeper corporate governance as part of a wider industrial policy that tightens the natural resource–development nexus.

In parallel, international action to create a global enabling environment for stronger governance must step up, to expose tax evasion, illicit financial flows and unfair pricing practices.

4.1

TWO TYPES OF DOMESTIC REVENUE—PUBLIC AND PRIVATE

There are two main categories of domestic revenue in Africa. The more important is public domestic revenue, most of which comes from taxes (mainly resource taxes). Since the early 1990s, tax revenue has increased in Africa, from 22 per cent of continental GDP in 1990 to a peak of 28.1 per cent in 2008 before dropping

to just under 25 per cent in 2011 and 24.8 per cent in 2014, nicely reflecting the volatility of commodity exports (Figure 4.1). These variations also mirror those of low-, middle- and high-income countries.

The second category of domestic revenue is private domestic revenue (in the formal and informal sectors). Though this category is hard to measure, the size of the financial sector (particularly banking, capital markets and insurance) is a useful indicator. Describing part of this second category as “idle resources”, ECA (2016a, p. 4) laments the \$1 trillion of excess reserves that “have not been effectively put to work to finance Africa’s development”. Growing stock market capitalization—owing in part to the fact that some countries compel natural resource companies to list on local exchanges—also highlights the significance of capital markets. Stock market capitalization in Africa increased from \$113 billion in 1992 to \$2 trillion in 2007 but fell by a quarter to \$1.5 trillion in 2012 after the global financial crisis (ACM-Insight, 2013). Other sources of formal domestic private revenue include pension funds and the insurance industry. Beyond all these formal sources is the huge informal financial sector.

Natural resources are the biggest contributors to public domestic revenue in Africa. Almost half of African member-countries of the Extractive Industries Transparency Initiative rely on extractive industries for more than a quarter of their government revenue (and even more for export revenue) (Figure 4.2). Oil-exporting countries collect more revenue, but it is not diversified, in contrast to the oil-importing countries, which collect less but more-diversified revenue, in direct personal and corporate income taxes and indirect taxes such as value-added tax (AfDB, OECD, UNDP and ECA, 2010).

17 The continental average hides differences between resource-rich and other countries; for example, the latter have broadened their tax base more (ECA, 2016a).

FIGURE 4.1 General government revenue by income group in Africa, 2000–2015 (per cent of GDP)

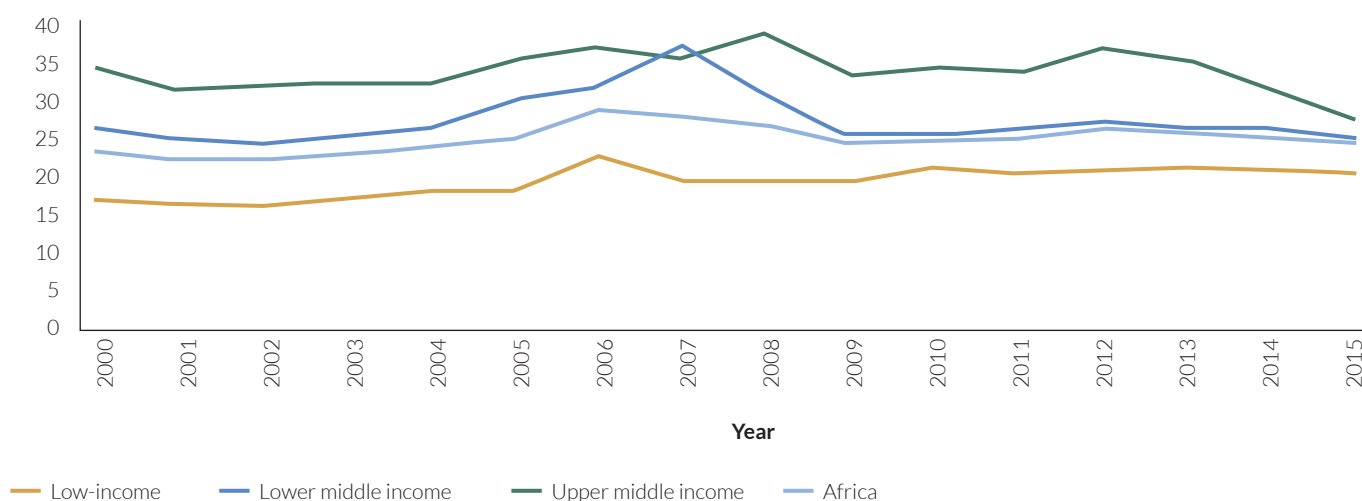
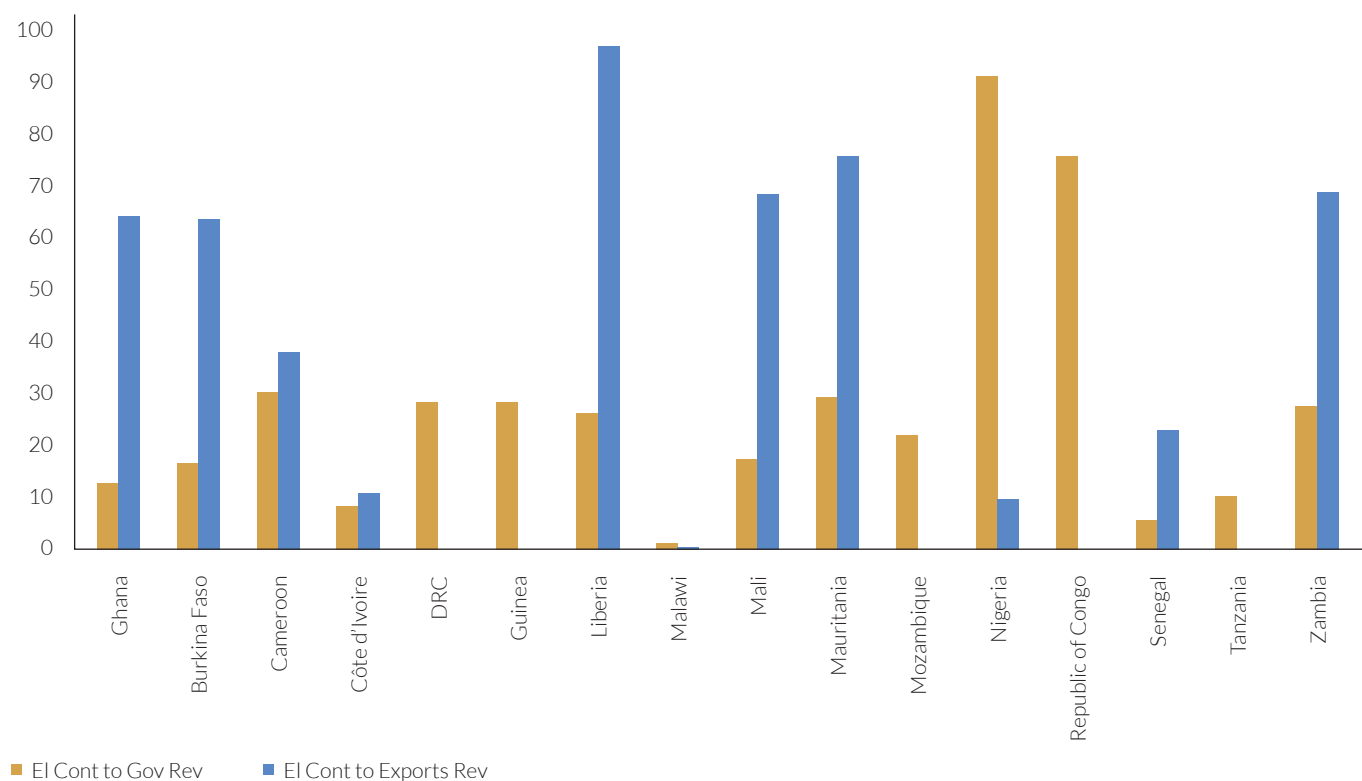


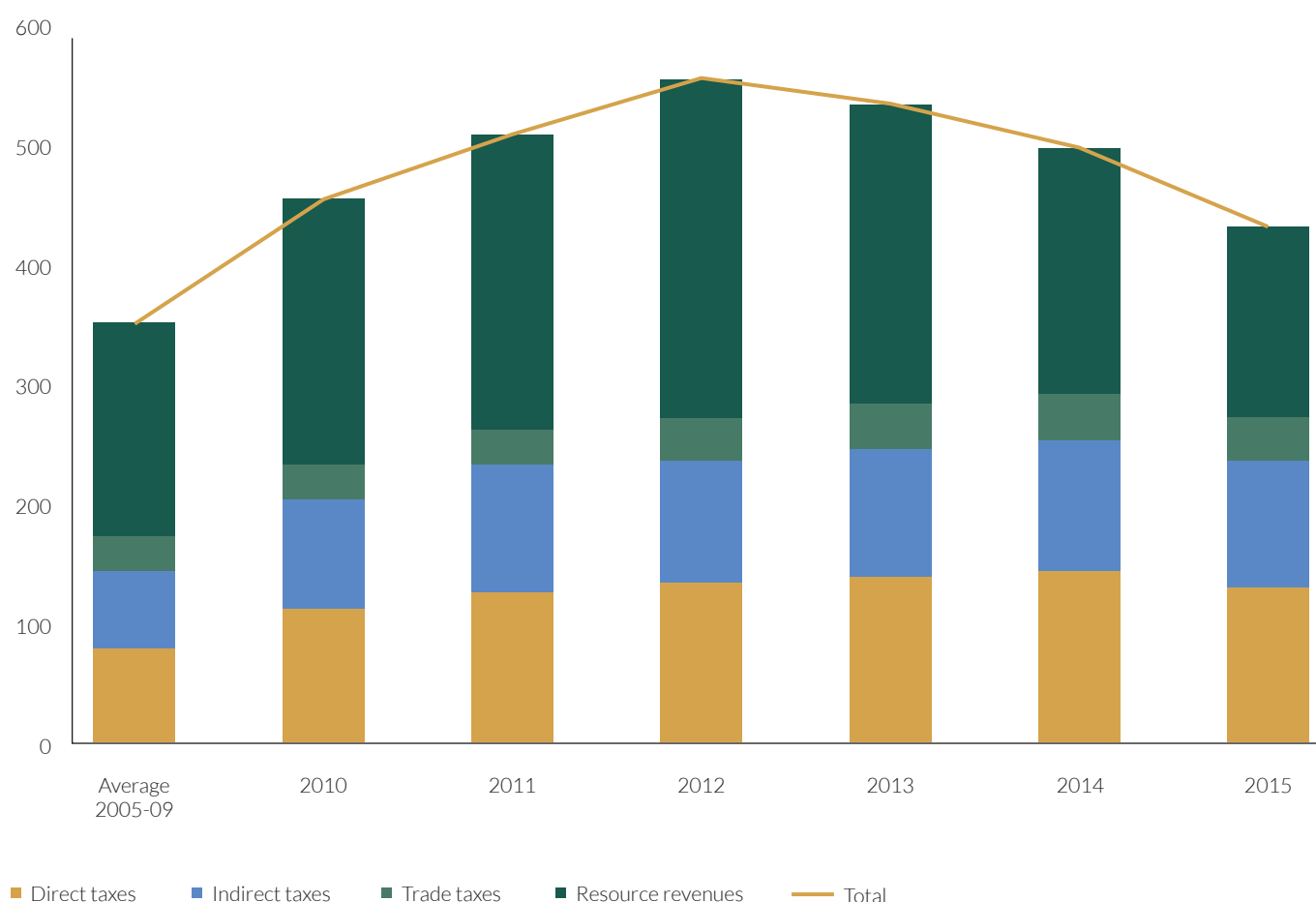
FIGURE 4.2 Contribution of extractive industry to government and export revenue, 2013 (per cent)



The structural dependence of resource-rich African economies on one or a few raw material export commodities keeps them vulnerable to price and demand volatility (Figure 4.3). Public revenue from resource taxes jumped from \$45 billion in 2002 to \$230 billion in 2008 but fell by nearly half, to \$129 billion, in 2009, as commodity prices slumped (reflecting the global financial crisis). The global recession pushed Botswana into fiscal crisis, highlighting its extreme dependence on diamonds, and compelled it to borrow \$1 billion from the African Development Bank.

Resource revenues picked up again after 2009, contributing to an overall peak of domestic resources at \$561.50 billion in 2012 before sinking as commodity prices, especially for oil, fell sharply. Public domestic revenue fell 22 per cent between 2012 and 2015, owing primarily to a 43.7 per cent slump in resource revenue, with devastating impacts on the public revenue and economies of oil-dependent Algeria, Angola, Chad and Gabon, where resource revenue collapsed by more than half. By contrast, between 2012 and 2016 non-resource-rich African countries, notably Ethiopia, Malawi, Rwanda, Swaziland, Seychelles and Togo, lifted their domestic public revenue with increases in direct taxes (AfDB, OECD and UNDP, 2017).

FIGURE 4.3 Tax revenue mix in Africa, 2005–2015 (\$ billions)



Source: AfDB, OECD and UNDP (2017).

FACTORS IMPEDING DOMESTIC REVENUE MOBILIZATION

Half a dozen main factors drive how—and how much—natural resources contribute to public and private domestic revenue mobilization.

4.2.1 Volatility in natural resource markets

Sales of Africa's natural resource commodity production are heavily skewed towards markets outside the continent, and international natural resource commodity markets are volatile, to the detriment of Africa's economies. Beyond being affected by real demand and supply, commodity prices have also been influenced by speculation, fed by high liquidity in international financial markets and relatively low interest rates, seeking higher returns in comparison to equity and debt securities (UNCTAD, 2008).

Some of the preceding material shows how global trends have exerted a heavy influence on the contribution of natural resources to domestic revenue mobilization. Africa's best decade of economic growth in 30 years coincided with the commodities boom, with natural resources accounting for roughly 35 per cent of the continent's growth since 2000. The average price of minerals (including metals) rose 260 per cent between 2000 and 2007; the price of oil rose from around \$25 in 2000 to \$141 in July 2008. Foreign direct investment to the extractive sector was important for the continent's ability to respond to market opportunities; the surge in oil prices prompted greater exploration and finds of oil and gas, which made countries such as Ghana new oil producers. Demand for minerals shot up, with world

crude steel production climbing 6.8 per cent a year between 2000 and 2007. The growth of demand from emerging economies, especially China, was a main driver. China's doubling of its share of world industrial output between 1995 and 2005 was paced by a sharp rise in its consumption of minerals. Between 2000 and 2007 China's share of global consumption rose from 13 per cent to 32.5 per cent for aluminium, from 11.8 per cent to 26.2 per cent for copper, from 10.1 per cent to 30.6 per cent for lead, from 6 per cent to 24.9 per cent for nickel, from 18.6 per cent to 39.9 per cent for tin and from 15.6 per cent to 48.2 per cent for seaborne iron ore (ECA and AU, 2011).

A downturn in Chinese demand has put a heavy pressure on recent declines in commodity prices (Figure 4.4). The downturn in commodity, especially oil, prices since 2012 has had significant negative impacts on a number of these countries, with Angola (oil) and Zambia (copper) experiencing economic contraction and significant devaluation of their currencies. Ghana had the same experience, owing to the drop in the price of gold and oil, its two main exports. Although the commodity boom and growth lifted the economic gloom of the preceding two decades, the subsequent downturn was a reprise of the long—1970s–1990s—economic decline induced by falling commodity prices and worsening terms of trade for Africa.

The effect of output and price volatility in the natural resource sector goes beyond to the wider economy, especially through the policies pursued by countries that have large windfall revenues. Where governments make bad decisions, windfalls do not lead to any social value (Stevens, 2003). Windfalls may also prompt governments to adopt policies that fail to develop the productive base, even stifling industrial development. For example, Nigeria took little initiative in upgrading its oil refining when oil prices were high and exported most of its oil in crude form.¹⁸

18 According to Krause (1995) and Mikesell (1997), many resource-rich African countries failed to convert the resource and commodity booms of the early 1970s and 1980s into industrial development. Similarly, booms in resource revenues may prompt countries to introduce subsidy programmes that turn out to be unsustainable in the long run (Auty, 1994) or to adopt protectionism in the booming sector.

FIGURE 4.4 Price movement of copper, crude oil, aluminium and gold, 2002–2016



Source: Infomine website (<http://www.infomine.com>).

A strong, yet likely temporary, upward swing in the world price could cause the following side effects (Frankel, 2012):

- A large real appreciation in the currency in the form of nominal currency appreciation if the country has a floating exchange rate or the form of money inflows and inflation if the country has a fixed exchange rate (Chen and Rogoff, 2003; Edwards, 1986).
- An increase in spending (especially by the government, which increases spending in response to higher tax receipts and royalties).
- A rise in the price of non-traded goods (goods and services such as housing that are not internationally traded) relative to traded goods (manufactures and other internationally traded goods other than the export commodity).
- A shift of labour and land out of non-export-commodity traded goods (pulled by the more attractive returns in the export commodity and in non-traded goods and services).

- A current account deficit (despite the enhanced revenue from commodity exports), thus incurring international debt that may be difficult to service when the commodity boom ends (Arezki and Brückner, 2010; Manzano and Rigobon, 2001).

The upshot is that Africa's export concentration has increased over the past 30 years. The export-driven growth based on natural resources since the early 2000s has deepened export commodity dependence and worsened the structural distortions of many African countries (UNCTAD, 2017), while fuelling industrialization of China and other industrializing emerging economies—but not of Africa. For example, the overall mineral (including oil and gas) export dependence of the Southern African Development Community region increased from 54 per cent in 2001 to 75 per cent in 2008, with the dependence rate of Angola, Botswana, Democratic Republic of Congo and Zambia rising to more than 80 per cent. Madagascar's dependency rate on minerals soared from 1 per cent to 24 per cent in 2016. The period 2001–2016 also witnessed a decline in Africa's manufacturing.

4.2.2 A country's knowledge of its natural resource endowments

Most African countries do not have comprehensive knowledge of their natural resources—land, forests and minerals—to serve as the basis for planning, including choosing among potentially conflicting uses or claims.

Geological information has much more value than simply improving the exploitation of mineral resources—it can indicate a turn to alternative land use that is more beneficial than mining. Geo-scientific data is fundamental for the economic development of a country and mitigation of geo-hazards (Ericsson and Gylesjo, 2014) and is vital for addressing the earlier issues on the quality of land and its minerals. National geological survey departments were established in many African countries by colonial governments in pursuit of the project of extracting resources from Africa. For example, Ghana's Geological Survey Department was founded in 1913 and its early achievements, including the discovery of manganese deposits, were directly linked to Britain's needs during the First World War. These departments suffered under structural adjustment programmes. Today, even as they remain functional, many are severely under-resourced, including poor equipment and communication facilities, and shortage and poor quality of human resources (Ericsson and Gylesjo, 2014).

Most African countries do not have comprehensive knowledge of their natural resources to serve as the basis for planning.

4.2.3 Terms of access for producers and benefit sharing

Despite widespread informal activity, African states retain substantial control over the licensing of exploitation rights for wood, minerals of export interest, and oil and gas, as key sources of public revenue. Licensing and supporting institutions for exploiting minerals, oil and gas, and to a lesser extent forest resources, are very much fashioned to support large-scale operators, usually foreign firms. All African oil- and gas-producing countries have, to varying degrees, state-owned firms involved in direct production, but in most of them production is dominated by foreign companies under production-sharing agreements. State-owned mining firms were dismantled or privatized as part of liberalizing reforms. The terms of access under which these firms are operating are key determinants of the contribution of the oil and gas and minerals sectors to domestic revenue mobilization.

The central issue in these agreements is how to balance a government's interest in getting a fair share of the wealth accruing from the exploitation of the non-renewable mineral resource and in ensuring a sufficient return to investors to encourage them to invest in the optimal economic recovery of the resource (Daniel et al., 2010). There is now a consensus that the terms on which Africa's oil and gas, and especially minerals, are exploited by (mainly) foreign firms do not optimize revenues or provide more general economic development benefits to African countries (AfDB, OECD, UNDP and ECA, 2010; ECA and AU, 2011). Today, oil-producing countries, for reasons including contractual terms, get a bigger share of the value of the resource than producers of minerals do, but all oil- and mineral-producing countries face common challenges on control and oversight of production costs and volumes and on irregular expatriation of resources by foreign firms, after a period of, perhaps, over-liberalization (Box 4.1). A "fair share of the economic rent of the sector" was the justification offered by the World Bank and other promoters of liberalization.

BOX 4.1

Has the liberalizing pendulum swung too far?

Since Ghana's 1986 legislation and associated reforms, more than 30 African countries have liberalized their mining regimes to attract foreign direct investment (Besada and Martin, 2013). From the late 1980s, as African countries competed for mining investment, their support for new foreign-owned mining ventures took precedence over other types of land use and environmental concerns, with scant attention to the accompanying social disruptions.

The reforms made mining a leading destination for foreign direct investment in most of Africa's extractive-exporting countries, and production and exports shot up with the start of the commodity boom. The annual foreign direct investment inflow in 2004 was \$15 billion (UNCTAD, 2005). By the beginning of the 21st century, foreign-owned multinationals, now enjoying extensive privileges, had displaced state-owned enterprises as the dominant actors. In Ghana the gold mining sector became the main destination for foreign direct investment, attracting more than \$6 billion between 1983 and 2002, and gold output quadrupled (Akabzaa et al., 2007), making the metal the country's most valuable export.

With liberalization, Mali and Tanzania became new major destinations for foreign direct investment and notable gold exporters. After troubled privatization, Zambia—one of Africa's main mining countries—experienced new investment and a revival of copper production, from a trough of 250,000 tonnes in 2000 to almost 700,000 tonnes in 2009.

Source: Compiled by ECA staff.

The tripling of mineral prices in 2000–2011 generated unprecedented profits for mining companies. Between 2002 and 2006 average net profits of the biggest mining firms increased more than 1,400 per cent, and between 2003 and 2011 their profits grew an average of 20 per cent a year. The sector rebounded quickly from the global financial crisis: for the top 40 global mining firms revenue increased 32 per cent from 2009 to 2010, breaking \$400 billion for the first time with a 156 per cent jump in net profits (PwC, 2011, 2012). These profits put in sharp relief the inequitable terms on which African governments had granted mining concessions (ECA and AU, 2011).

Take Zambia. From 2004 to mid-2008 the price of copper more than quadrupled, from around \$1,800 to over \$8,000 per tonne, and was reflected in the profits of foreign firms: profits of Konkola Copper Mines nearly quadrupled, from \$52.7 million to \$206.3 million. By contrast, Zambia earned only \$10 million in royalties in 2005/2006, owing to some of the lowest royalty rates in the world (Lungu, 2008). This poor return was due to the fiscal terms of the revenue-sharing agreements, which in some cases provided for royalty rates of a mere 0.6 per cent on the gross generated revenue, with some questionable practices (Simpasa et al., 2013).

TABLE 4.1 Changes in the terms of trade and net income payments, selected developing country groups

Impact of changes in terms of trade and net income payments on national disposable income in selected developing country groups, average for 2004 (percentage of gross domestic product)				
		Effects from changes in terms of trade	Effects from changes in net income payments	Net impact
	Oil exporters	7.3	-0.2	7.0
	Exporters of minerals and mining products	5.7	-4.6	1.2
	Other commodity exporters	-0.2	-0.1	-0.3

Source: ECA staff.

Although developing countries worldwide that exported hydrocarbons and minerals had terms-of-trade gains in 2004, the increased net income payments (to multinationals) eroded most of these gains among mineral exporters, but not among oil exporters (UNCTAD 2008) (Table 4.1).

Until the upsurge in prices, many African governments saw critics of the liberalized mining regime as a threat to the strategic project of attracting foreign direct investment. But the inequities in benefit sharing that were exposed by the decade-long price upsurge served to radicalize growing sections of African elites and made an increasing number of governments ready to demand change.

Since 2006, quite a few African countries have amended their laws or renegotiated contracts with mining firms, with various levels of success. The most important changes include increases in royalty and company tax rates, though stability clauses in contracts have minimized the effects in some

countries. Ghana increased its royalty rates from 3 per cent to 5 per cent in 2010 for all mining firms—but two of its biggest gold producers have stability clauses that freeze the tax rates. And so the government never implemented it before withdrawing it. In 2016, in the face of falling gold prices and threats from one of the biggest gold multinationals that it would lay off hundreds of workers, the government controversially awarded the firm a new contract, with stability clauses, on fiscal terms so generous as to be widely condemned as violating the mining law (Third World Network–Africa, 2016).

Zambia's attempt to impose a windfall tax met resistance from multinationals and political pressure, forcing a retreat before a change of government put fiscal reforms back on the agenda (OSISA et al., 2009). There was similar resistance in Ghana, Malawi and Tanzania by companies invoking the sanctity of contract.

Does China offer a better system (Box 4.2)?

BOX 4.2

“Resources for infrastructure” contracts

Chinese resources for infrastructure contracts have introduced a new element into terms of access. Under these contracts, China provides African countries with financing to develop infrastructure in exchange for payment through natural resource commodities, agricultural and mineral.

As of 2011, for example, 10 projects worth \$22 billion for building dams, roads and other infrastructure had been signed, to be paid for with, for example, cocoa, minerals and oil over agreed periods (Konijn, 2014). A factor favouring these contracts is that Africa's infrastructure deficits are huge, but the continent finds it difficult to get financing from Western sources.

But the arrangements raise questions about how African countries can accurately measure whether the agreements offer value for money. This includes the possible links with the rest of national economies forgone by the tied use of Chinese firms, inputs and, frequently, labour. There are also governance issues; resources for infrastructure contracts tend to be cloaked in secrecy and escape the scrutiny that resource contracts increasingly undergo.

Source: Compiled by ECA staff.

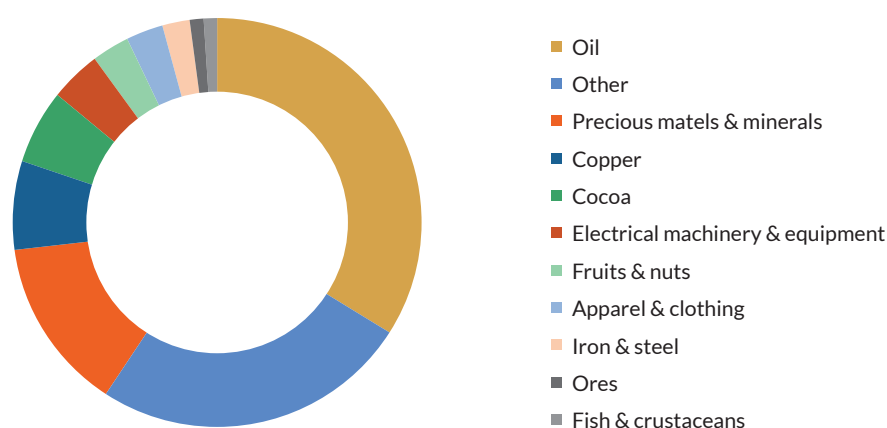
4.2.4 Illicit financial flows and corruption

Some of the biggest natural resource governance challenges undermining domestic revenue mobilization are illicit financial flows and corruption. Africa loses about \$50–65 billion a year to illicit financial flows (AU and ECA, 2015). Illicit financial flows in Africa are unequally distributed by country (based on the data that can be gleaned), and some sectors of the economy (and the countries where those sectors are prominent), specifically extractives, are at a higher risk of sourcing such flows.

A sectoral breakdown for 2010, the most recent year for which data are available, shows that oil and precious metals and minerals represent the bulk of the total amount of illicit financial flows recorded between 2000 and 2010 (Figure 4.5). This suggests a need for better understanding the governance dynamics in these two sectors.

Several factors make Africa's natural resource sector prone to corruption-driven illicit financial flows. The sector is heavily controlled or influenced by the political elite or politically exposed people. The complexity of the legal and regulatory frameworks and the number of stakeholders involved (including local producers, government agencies and multinational corporations) in the sector make it challenging to ensure transparency, equitable participation, voice and accountability. As indicated by Le Billon (2011, p. 3), “this opens the door to manipulation, particularly if auditing capacity is limited or corrupt”. For instance, in mining, corruption-related illicit financial flows can occur at each stage of the mineral value chain (ECA, 2016c). This reality suggests the need for tighter regulation if domestic revenue mobilization is to be enhanced.

FIGURE 4.5 Sectoral breakdown of illicit financial flows, 2010



Source: AU and ECA (2015).

Multinational corporations take advantage of gaps and loopholes in the legal and regulatory frameworks to engage in activities such as transfer pricing, base erosion profit shifting and illicit activities, reflecting lack of enforcement of laws and regulations. They repatriate hefty sums without paying agreed-on dues via, for example, market rigging, insider trading, payment of illicit political donations, embezzlement, fraud, bribes and commission kickbacks (Baker, 2005). These activities have contributed to the erosion of domestic revenue mobilization efforts by African countries.

The dispute that erupted in early 2017 between the Tanzanian government and Acacia Mining—majority owned by Barrick Gold, the biggest gold producer in the world—contains similar allegations and points to defining weaknesses in fiscal and administrative regimes. The Tanzanian government has accused Acacia of under-declaring the amount and value of gold and other minerals, depriving the country of billions of dollars in revenue between 1998 and 2017. Some questions stand out, such as the inequitable terms of Acacia's investment, under which the firm posted \$444 million in dividends between 2010 and 2015 while paying no corporate income tax in Tanzania; the seeming knowledge gap between Acacia and the country's regulatory institutions on the mines' geology; and the capabilities of some Tanzanian institutions, including the Mineral Audit Agency.

Of equal concern is that illicit financial flows from Africa hide in financially secret jurisdictions (tax havens or offshore financial centres). They operate complex legal structures that make it easier for people or entities to escape their tax obligations (Box 4.3).

4.2.5 Dominance of the informal economy—in jobs and some commodities, but not taxes

The informal economy is generally dominant, in some areas at least, in Africa's economies. It employs most of the working population and is in a complex relationship with the formal sector but suffers neglect and sometimes hostility from the state. The natural resource sector also exhibits this duality, with implications for the contribution of natural resources to domestic revenue mobilization. The sector is dominated by self-employment and by micro and small-scale enterprises. But there are no accurate measures of the size of the informal economy; according to one estimate, it generates 90 per cent of some African countries' jobs (including Benin, Tanzania and Zambia) and supports some of the vulnerable in society (ILO, 2009, as cited in Weng, 2015). Even the definitions are opaque (Box 4.4).

In Africa, the informal economy is a substantial producer of natural resource commodities,

BOX 4.3

Secrecy robs Nigeria of millions of dollars

In May 2012 Global Witness pieced together detailed court documents and other evidence that exposed how Nigerian subsidiaries of Royal Dutch Shell and Italian oil giant Eni agreed to pay \$1.1 billion for one of Nigeria's most lucrative oil blocks, OPL245.

The payment was made by Shell and Eni to the Nigerian government, which had a separate agreement to pay the same amount to Malabu Oil and Gas, a company widely believed at the time of the payments to be controlled by convicted money launderer¹ and former oil minister Chief Dan Etete. In July 2013 a British High Court ruled² that Etete was indeed the owner of Malabu. As Etete had awarded the oil block to Malabu while oil minister during the regime of dictator General Abacha, he had effectively given himself one of the most lucrative oil blocks in Nigeria.³

Shell and Eni denied paying any money to Malabu Oil and Gas (The Economist, 2013; Eni correspondence with Global Witness, October 2012). However, High Court proceedings and other evidence reported by Global Witness revealed that Shell and Eni were aware of and in agreement that the deal was for the benefit of Malabu and had even met with Etete face to face on several occasions. Testimony heard during the case indicated that an official from Shell previously negotiated directly with Etete over "iced champagne" and that Eni officials had enjoyed a luxurious dinner at a five-star hotel in Milan with him.⁴

Global Witness observed that the deal was structured primarily to allow Shell and Eni to claim that they had not struck a deal with Etete nor Malabu. Yet in making the payments, Shell and Eni effectively bought the block from Etete for over \$1 billion, thus monetizing an asset acquired by Malabu in highly suspicious and possibly illegal circumstances.

Global Witness reported that over \$801 million of the money transferred to Malabu was later transferred to a further five shell companies with hidden owners, raising concerns as to who truly benefited from this deal.

¹ Etete was convicted of money laundering in France in 2007.

² Energy Venture Partners Versus Malabu Oil & Gas, Commercial court, Queen's Bench Division, 2011-13. The case was brought by a broker who alleged that Etete failed to pay him for work he had done in obtaining a buyer for OPL245. Shell and Eni were not part of those proceedings.

³ After General Abacha died in 1998, the administration of Nigerian President Obasanjo revoked Malabu's licence and awarded it to Royal Dutch Shell, but after much legal wrangling a Nigerian court re-awarded the licence back to Malabu in 2006.

⁴ Energy Venture Partners Versus Malabu Oil & Gas, Commercial court, Queen's Bench Division, 2011-13. The case was brought by a broker who alleged that Etete failed to pay him for work he had done in obtaining a buyer for OPL245. Shell and Eni were not part of these proceedings.

Source: Reproduced from Global Witness (<https://www.globalwitness.org/en/archive/scandal-nigerian-oil-block-opl-245-0/>).

BOX 4.4

Defining the informal economy

The term informal economy—or informality—has varying definitions in the academic and policy literature.

For Meier and Rauch (2005) informality has several characteristics: easy entry to start an activity; lack of stable employer–employee relationships; small scale of operations; and poor access to critical services such as finance, information and market-enhancing infrastructure and to skills gained outside a formal education.

The ILO (2009) finds that most workers in the informal sector, even those who are self-employed or wage workers, do not have access to secure work, benefits, welfare protection or representation.

Weng (2015), following Schneider (2002), broadly defines the informal economy as “economic activity that is not subject to government regulation, taxation or observation”.

Source: Compiled by ECA staff.

minerals, and wood and non-wood forest products, but its contribution to public resources is far less. Including agricultural land use, the informal economy sustains rural livelihoods and produces large volumes of goods that rival the formal economy. Informal smallholders tilling land under customary tenure have 80 per cent of all farms in Africa south of the Sahara and produce up to 90 per cent of food in some countries and, in many, produce a large share of agricultural export commodities (Weng, 2015). Because of their marketing channels, smallholder farmers producing for export come within the reach of the taxing state. The situation is different in the mineral and forestry sectors, where the resources are formally controlled by the state.

African states license small-scale miners, but practices vary for forests. Ghana bans small loggers and millers while Cameroon grant licences. In both sectors, irrespective of regulatory regime, informal producers account for much of the output. The predominant orientation of African states towards global markets for natural resource commodities has meant that domestic and regional markets for wood and minerals, such as salt, are largely

served by the informal sector, dominated by indigenous producers.

A third of Ghana’s gold is produced by artisanal and small-scale mining operators, only a small fraction of whom have legal concessions. Unlicensed informal gold mining is thought to employ about half a million people, and the scale of its environmental impacts has resulted in several militarized initiatives by the Ghanaian government to stamp it out, with the latest in 2017.

About 90 per cent of minerals produced by artisanal miners in Democratic Republic of Congo come from the informal sector. Despite a ban since 1979 on small-scale timber production in Ghana, the informal sector employs more than 100,000 and is the main timber supplier to the domestic market. In Cameroon, Democratic Republic of Congo and Republic of Congo more timber is sold by unregistered rural loggers than by registered companies (Eba’a Atyi et al., 2013). The volume of illegal harvesting in African countries is estimated at 30 per cent in Ghana; 50–60 per cent in Cameroon, Mozambique and Equatorial Guinea; 70 per cent in Gabon; and 80–90 per cent in Benin and Nigeria (European Parliament, 2017).

The loss of revenue from informal production is the key concern of African states. That the sector is beyond the reach of environmental, health and safety and other regimes is a lesser issue. However, the loss of revenue to the state cannot always be equated with an informal economic activity's lack of contribution to taxes. Anecdotal evidence points to how savings and investment by illegal small-scale miners and loggers across Africa have fuelled economic expansion in rural areas, yet the loss of public revenue from this primary activity is as real as the multiplier effects of these small-scale operators' earnings.

There is a growing body of opinion that the quality of institutions and accountability mechanisms is vital to how countries manage natural resources and development outcomes.

Corruption and collusion among state officials and among sections of the political and economic elite encourage the vibrancy of the informal sector in minerals and timber, as does the absence or weak reach of the state in informal activities. Such practices are partly the legacy of the colonial period, when customary rights were tolerated or even recognized. Most colonial states focused on certain economic areas and left the “natives” to continue with some of their customary practices, such as appropriating minerals for construction or harvesting fuel wood and other forest products. In many African countries today, citizens, especially in rural areas, freely appropriate and use minerals vested in the state—sand, clay, stone and salt—without prior state approval. There are strong attachments in many communities to what they regard as customary practices long tolerated by the state—a tolerance that citizens see as a bar to the legitimacy of the state's attempts to assert its authority.

4.2.6 Quality of public institutions and accountability mechanisms

In the debates over the nature and effects of the resource curse, there is a consensus that the quality of institutions and accountability mechanisms is vital in how countries manage natural resources and development outcomes. At the heart of the growth diagnostic, drawing on the theories of (Hausmann et al., 2006), is the thinking that the quality of institutions is a major determinant of growth and that it is thus futile to recommend good macroeconomic or microeconomic policies if the institutional structure is unable to support them.

Many authors argue that weak institutions lead to inequality, intermittent dictatorship and lack of constraints to prevent elites and politicians from plundering the country (Acemoglu and Robinson, 2012; Easterly and Levine, 2002; Rodrik et al., 2003). The continent's experiences with negotiating contracts and designing fiscal frameworks, designing and enforcing environmental standards, enforcing tax obligations of firms, managing revenue and obtaining adequate information on natural resource endowments have all highlighted the importance of the quality of institutions.

The drain of resources from corruption offers support for the growing unanimity on the importance of robust accountability and transparency mechanisms. Across Africa, in addition to the transparency mechanisms focused on the natural resource sector, such as the publication of contracts and of payments under the Extractive Industries Transparency Initiative, there is a recognition that much more needs to be done. Most legislatures have disappointed in their oversight responsibilities over the executive branch (see Section 2.1.1 in Chapter 2), and many African governments are reluctant to pass laws giving citizens the right to information.

UNSHACKLING DOMESTIC REVENUE MOBILIZATION

Africa's governments have four main ways to strengthen their domestic revenue mobilization.

4.3.1 Optimizing capture and stabilizing revenue

The impact of the commodity boom and slump of the last 15 years and the exposure of inequities in benefit-sharing regimes have underlined the need for countries to capture a greater slice of revenue and prepare against commodity price instability, drawing on some key lessons (Box 4.5).

Fiscal harmonization will help with the challenge posed by illicit financial flows.

Curbing illicit financial flows

Fiscal harmonization will help with the challenge posed by illicit financial flows. The African Tax Administration Forum has estimated that illicit financial flows in 2003–2012 averaged 5.5 per cent of GDP in Africa, south of the Sahara, compared with 3.9 per cent of GDP in all developing countries. Despite the awareness of such costs, African countries are struggling to deal with illicit financial flows, given capacity constraints, gaps in legislation and insufficient attention to African specificities such as the influence history and colonial-type resource extraction on illicit financial flows and resistance of the major powers to subject the issue to a true multilateral forum such as the United Nations.

Agbazue et al's (2017) study of 25 African countries catalogued the challenges facing these

countries. Still, illicit financial flows are an area of growing continental cooperation, involving the African Tax Administration Forum and other actors. The forum has supported several African countries in drafting transfer pricing laws as part of its role in the production and dissemination of e-knowledge on tax matters to inform policy and legislation formulation, foster transparency and accountability and improve revenue collection. The forum also undertakes capacity building.

Stabilizing revenue

Most African governments pursued pro-cyclical spending during the commodity boom, pushing some of them into economic difficulties when prices started to decline, exposing their lack of strategies to mitigate the effects of commodity price instability. This issue is linked to revenue management, anchored on transparency, participation and accountability (see Chapter 2).

4.3.2 Supporting and mainstreaming the informal natural resource sector

Africa's foreign-dominated large-scale mining sector enclaves sit in a domestic context of vibrant and economically vital artisanal and small-scale mining sectors employing and supporting much larger numbers of people—yet these sectors receive only a fraction of the government attention. Similarly, Africa's externally oriented formal timber sector is not as well integrated domestically and regionally as the informal loggers. Informal operators in the mining and forestry sectors are not a homogeneous group, and many are engaged as a survival strategy, though quite a few are also commercial operators. Informal operators make important contributions to private domestic revenue mobilization and offer livelihoods to millions of people in Africa, but their contribution to public (and private) domestic revenue mobilization can be improved substantially.

African governments have been much more focused on informal producers in mining than in forestry because of the perceived revenue losses due to

BOX 4.5

Lessons from earlier fiscal responses

The recent boom and bust suggest that governments should more carefully think through reforms than they did when rushing responses to the commodity boom. It would also seem that legislated frameworks are better than contracts for managing resource exploitation because legislated frameworks narrow the scope for discretion, bad deals and corruption and facilitate transparency and comparability. Investment competition exerted a downward push on Africa's mining fiscal regimes as countries took part in a race to the bottom in trying to outdo each other in the incentives offered to foreign investors.

A growing recognition that cooperation would be more beneficial is expressed in several continental and regional frameworks and agreements, such as the Africa Mining Vision Action Plan, the Economic Community of West African States Harmonization Directive and Mineral Development Policy, and the Southern African Development Community Regional Mining Vision. In July 2016 the African Union Assembly of heads of state and government signalled their support for fiscal harmonization by asking the ECA to undertake a study on the development of a model law that would provide guidance to member states in reviewing their royalties and fiscal regimes. The report prepared in response to that request noted that fiscal regimes along the mineral value chain in the continent continue to be incoherent, inconsistent and patchy (AMDC, 2016). Countries will also benefit from investing in geological information to raise their bargaining strength.

Source: Compiled by ECA staff

artisanal and small-scale mining in minerals of export value. The main efforts here have been in licensing those producing minerals of export value, and the limits of this approach seem to have been explored.

Across Africa, the informal sector is the main source of billions of dollars' worth of development minerals—that is, minerals and materials that are mined, processed, manufactured and used domestically in industries such as construction, manufacturing, and agriculture (Franks et al., 2016)—but they have received little state support, even if they suffer less harassment than producers of export minerals. Registering and formalizing the artisanal and small-scale mining sector are critical to raising the sector's contribution to domestic revenue mobilization in a more supportive environment.

Steps in any registration or formalization drive, which would help break the perception among

many artisanal and small-scale mining operators that there is little difference between being legal or illegal, include holding local consultations and dialogue; linking provision of technical and financial support and capacity building (including for health and safety) to registration and formalization; enforcing legislation on formalization; reducing the bureaucracy for registration, including simplifying the process; decentralizing registration; reducing the fees for registration; and demarcating land with good mineralization for artisanal and small-scale mining (Collins and Lawson, 2014).

Ghana's 1989 legislation on artisanal and small-scale mining was a pioneering step in Africa south of the Sahara, and by the mid-1990s, 36 African countries had legalized artisanal and small-scale mining (Hilson et al., 2014), but the majority still lack artisanal and small-scale mining-specific

legislation. The Africa Mining Vision Action Plan has a devoted programme line for the artisanal and small-scale mining sector, and several regional frameworks (such as the Economic Community of West African States) recognize the value of artisanal and small-scale mining.

4.3.3 Leveraging domestic revenue and innovative financing instruments

Because natural resource revenue is finite and volatile, Africa must mobilize revenue domestically through prudent and sustainable management of these resources (ECA, 2016b). Over \$520 billion a year could be raised from domestic revenues, compared with the \$50 billion received in official development assistance and the \$168 billion from minerals and mineral fuels (ECA and NEPAD, 2014). The increase in Africa-wide tax revenue from \$331 billion in 2009 to \$561.5 billion in 2012 (AfDB, OECD and UNDP 2017) was driven by an increase in resource revenues in, particularly, oil-exporting countries.

Botswana is a well-known example of a country that has maximized revenue collection from its natural resources and deployed that revenue in improving socio-economic outcomes—even though it has not yet diversified through industrialization. Its economy still relies largely on diamonds.

Findings from the Inter-Agency Task Force on Financing for Development indicate that even with declines in revenue mobilization—after the global financial crisis—all global country groupings saw growth in median tax revenue after 2000, with the gap narrowing between countries in developed and developing regions over the period: “Least developed countries (LDCs) generated particularly strong growth in median tax revenue, from under 10 per cent of gross domestic product (GDP) in 2001 to 14.8 per cent in 2015. Nonetheless, a gap remains, underscoring the potential for developing countries to raise more revenue through taxation” (UN, 2017, p. 30).

The link between revenue mobilization and service delivery is well acknowledged. Evidence from, for example, Gaspar et al. (2016) indicates that countries with tax revenue below 15 per cent of GDP have difficulty in funding basic state functions. Taxes in half the least developed countries remain below that threshold, especially countries that are currently experiencing or have recently experienced conflict (UN, 2017).

With the financing needs for Agenda 2030 estimated to surpass official development assistance, a mix of financing sources and instruments is necessary to finance the development needs of African countries. The UN estimates that additional resources of \$1.4 trillion a year are needed to achieve the SDGs in developing countries, including Africa. This corresponds to an average GDP of 11% (Schmidt-Traub, 2015). Thus mobilizing domestic public and private revenues remains a key area of commitment by member states in the outcome document of the Addis Ababa Action Agenda on Financing Sustainable Development Goals.¹⁹ Member states further committed to “enhancing revenue administration through modernized, progressive tax systems, improved tax policy and more efficient tax collection”. In 2015 tax revenue in Africa (including primarily direct taxes, indirect taxes and trade taxes) was estimated at \$280 billion, about 61 per cent of total revenues (\$458 billion),²⁰ a slight improvement from previous years. Most of the increase in tax revenue came from soundly implemented tax policies and good administration, providing increased revenues from natural resources.

Some analysts have argued that the heavy reliance of the tax base on natural resources, hence on commodity prices, is a major factor affecting public resources. Others have debated the narrow set of domestic revenue that are currently being mobilized in most African countries, calling for scaling up of government efforts and development partners’ support for enhanced domestic revenue mobilization. ECA (2016b) identified financing instruments

¹⁹ A/RES/ 69/313

²⁰ African Economic Outlook fiscal data (www.africaneconomicoutlook.org).

that could increase domestic revenue in Africa, including sovereign wealth funds (Box 4.6), pension funds, infrastructure development funds and diaspora bonds. It also emphasized

the need to further develop African financial markets, which can contribute to long-term fiscal sustainability and increased domestic and foreign investment.

BOX 4.6

Sovereign wealth funds (and similar) in three African countries

Diallo et al. (2016) put total capitalization of African sovereign wealth funds at \$16.2 billion—which is only 0.24 per cent of global capitalization of sovereign wealth funds (\$6,831 trillion) and low relative to Asia's share (which is 40 per cent of the global total). This low rate stems from the perceived political risk and weak governance for African sovereign wealth funds. Two African countries manage their windfalls through sovereign wealth funds in different ways.

Botswana's Pula Fund is intended to preserve part of the earnings from diamonds for future generations. The fund is made up of securities denominated in other currencies, thus acting as a sinking fund to offset the depletion of diamonds and a buffer to smooth global fluctuations. Daily management is by independent asset management professionals with little political interference.

Nigeria's sovereign wealth fund was created in 2012 out of the Excess Crude Account, with an asset base of \$1.5 billion as of early 2017. It has three priorities: stabilization, future generations and infrastructure investment. The Excess Crude Account was created in 2004 to be used to save oil revenues above a base amount derived from a defined benchmark price, primarily to protect planned budgets against shortfalls due to volatile crude oil prices. By delinking government expenditure from oil revenue, the Excess Crude Account aims to insulate the Nigerian economy from external shocks. Surging crude oil prices led to the Excess Crude Account increasing from \$5.1 billion in 2005 in reserves to over \$20 billion by November 2008, accounting for more than a third of Nigeria's external reserves at that time. But by June 2010 the account had fallen to less than \$4 billion, due to budget deficits at all levels of government in Nigeria and the steep drop in oil prices. The Excess Crude Account was restored in May 2017 with \$87 million added into the \$4 billion that was left as of 2010.

Cameroon does not have an official sovereign wealth fund, though the Société Nationale des Hydrocarbures seems to function as one. It regulates the entire oil sector and collects revenues from it. (The treasury and tax administration undertake similar functions.) It works closely with the ministry of finance and less so with the tax administration. It coordinates the oil and gas sector and shares information on revenue generation from the oil companies through its reports. It is a fully state-owned company. Some government purchases and consumption have been funded from it. The government publishes information on production and revenues through it on the Extractive Industries Transparency Initiative country website. However, there does not seem to be clarity on the rules governing state withdrawals, pointing to the need for coherence.

Source: Compiled by ECA staff

4.3.4 Moving to a more proactive state

The challenges and agenda for improving natural resource governance for better domestic revenue mobilization outlined above require new types and quality of public institutions and more generally, a proactive state, which breaks with the approach of the past 30 years. The shift from a focus on extracting and exporting natural resource commodities to a diversified economy with strong links between the natural resource sectors and the rest of the national and regional economy requires institutions undergirding policies that integrate mining, industry and development (ECA and AU, 2011). The shift also calls for a political leadership capable of offering an integrated vision and leading society (Kitaw, n.d.). The historical evidence shows that the active role of the state, not merely as

the creator of an enabling environment but as a strategic actor and conductor in the economy, has been a key factor in mobilizing domestic revenue for structural economic transformation in other regions of the world.

There has been a growing shift in the resource governance agenda and policy outlook on the continent, away from the narrow focus on maximizing resource rents to leveraging the continent's resource endowments to achieving greater inclusiveness, sustainable growth, concrete development outcomes and economic transformation (Bello, 2014). This has translated into natural resource-based transformation frameworks at the continental, subregional and national levels (see Section 2.3 in Chapter 2 and Box 4.7).

BOX 4.7

The Africa Mining Vision

The Africa Mining Vision, because of its forward-looking character and potential, has generated many expectations, but obstacles remain.

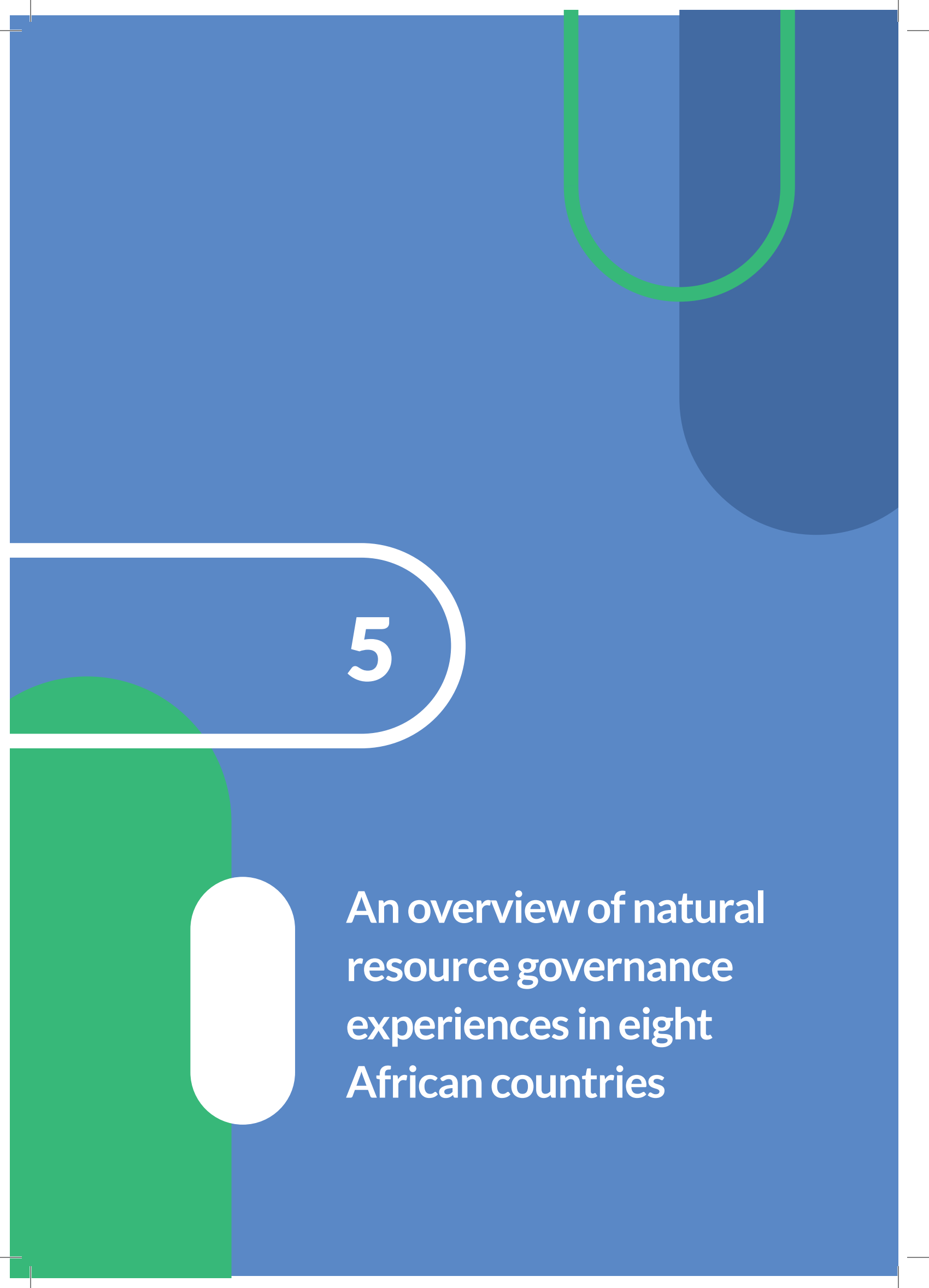
The most important of these is building a sustainable constituency for change among African governments and societies, given their stakes in the mineral economy. Then there are the short time horizons of many African leaders, which have been a contributory factor in failures to reform the sector. That short termism is fed by the structural dependence of countries on the revenue from their mineral exports, which means that the most transformative elements of the Africa Mining Vision agenda involve disrupting the status quo. There also appears to be an emerging pattern where some governments are embracing the “low-hanging fruit” of the Africa Mining Vision agenda, which promises some reform but are least disruptive to the status quo.

Source: ECA staff

CONCLUSIONS

African countries need to improve their capacity to raise and manage tax revenue, while facing head-on the challenges that undermine domestic revenue mobilization, including illicit financial flows, tax evasion and competitive fiscal regimes (such as those engaging in a race to the bottom). Beyond domestic revenue mobilization, they need to formalize the natural resource sector to curb such issues as poor working conditions, low wages and poor environmental practices.

Some countries have made progress by adopting natural resource governance frameworks such as the Extractive Industries Transparency Initiative and the Kimberley Process Certification Scheme but should prioritize Africa's own framework—the Africa Mining Vision. Particularly urgent is the need for regional economic communities to harmonize fiscal regimes to encourage regional value chains. Greater engagement of local communities in planning decisions will remain key.



5



An overview of natural
resource governance
experiences in eight
African countries

This chapter examines the disparate impacts of natural resources in eight African countries, selected because they represent different geographic regions and modalities of resource governance. The case study countries are Botswana, Cameroon, Côte d'Ivoire, Egypt, Nigeria, Madagascar, Tanzania and Uganda. In terms of methodology, field visits were conducted in each case study country, and meetings were held with government officials, development partners, private sector, civil society, and other stakeholders. Stakeholders were interviewed based on a set of questionnaire aimed at collecting and analyzing quantitative and qualitative data on four broad themes namely development planning, natural resource governance, domestic revenue mobilization and structural transformation.

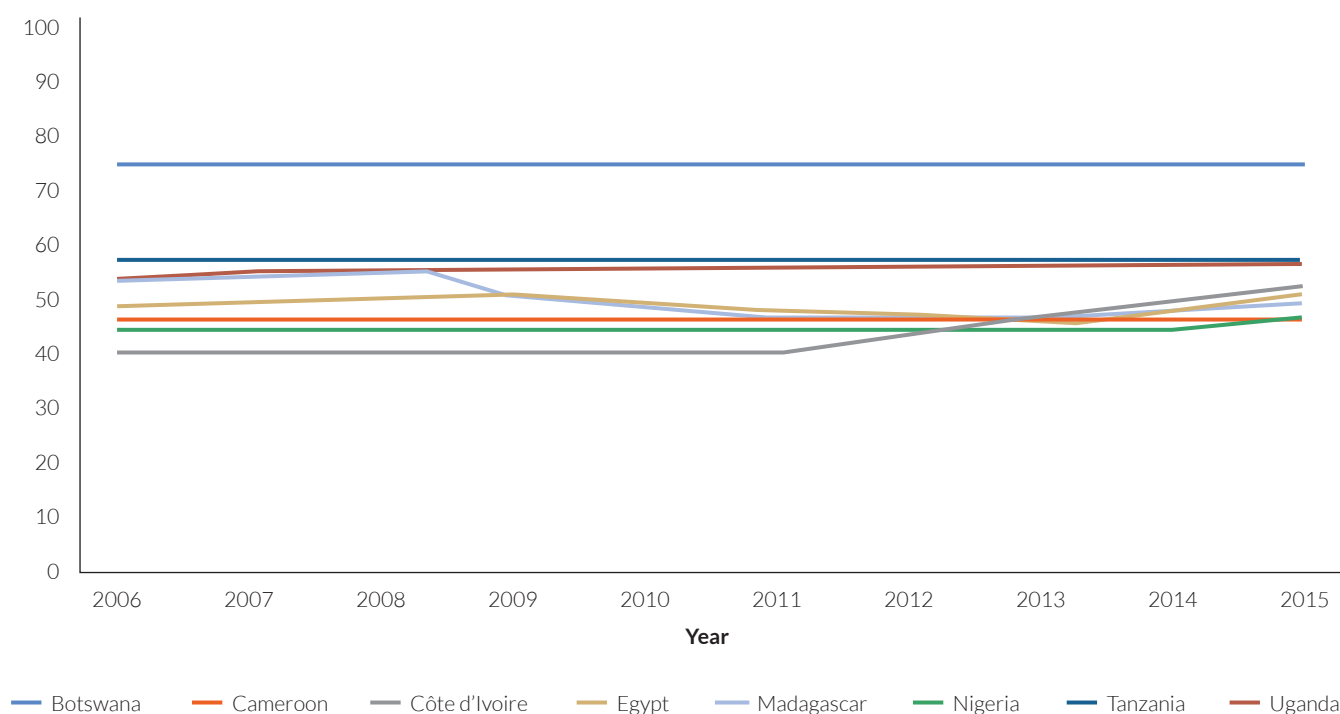
5.1

CHARACTERISTICS OF THE EIGHT

5.1.1 Political governance

Each country is unique with its own governance and political system. Botswana is a stable, democratic country with an independent judiciary.²¹ The country has consistently held elections and been ranked among the least corrupt countries on the continent. It was one of the highest scorers on overall governance on the Ibrahim Index of African Governance in 2006–2015 (Figure 5.1).²² Yet politics has been

FIGURE 5.1 Overall governance score on the Ibrahim Index of African Governance in eight selected countries, 2006–2015 (0, worst score in Africa, to 100, best score in Africa)



Source: Ibrahim Index of African Governance website (<http://mo.ibrahim.foundation/iag/>).

21 United States Agency for International Development website (<https://www.usaid.gov/botswana>).

22 Ibrahim Index of African Governance website (<http://mo.ibrahim.foundation/iag/>).

Although the eight countries' GDP growth averaged 4.2 per cent in 2016, higher than the 2.2 per cent for Africa as a whole, the proportion of people living below the poverty line—\$2 a day in purchasing power parity terms—ranged from 18.2 per cent (Botswana) to 81.8 per cent (Madagascar).

dominated by one political party, in power since independence in 1966. With elections in 2019, questions about regime change are being asked by some Batswana, who have grievances and believe that the political system is becoming increasingly complacent and socially unjust.

Another politically stable African country is Tanzania, a pace setter not only in East Africa, but also continentally. Its success in organizing four major competitive elections and peaceful regime transitions has contributed to shaping perceptions about the country, as evidenced in relatively favourable rankings on global governance indices. Progress in political governance has been paced by reform efforts in economic and corporate governance, including reform of public financial management systems, institutional development, and autonomy and capacities of local government entities.

Uganda has had around nine episodes of coups and regime changes since independence in 1962. It is currently governed under a multi-party system, after a referendum in July 2005. However, clashes between ethnic groups persist, especially in western Uganda, where the bulk of oil reserves are.

In Cameroon 64 per cent of the adult population is dissatisfied with the functioning of democracy, 23 per cent assert that it functions poorly, 14 per cent supports the view that the army should

have control of political decisions and less than 10 per cent supports the statement that a “strong man” should run the country (Cameroon National Institute of Statistics, 2017). With elections in 2018, political succession, lack of inclusiveness and good governance more broadly are now centre stage in business and policy-making circles. Governance seems to be one of the biggest challenges to improving the investment climate and business environment in Cameroon—and to peace, security and development in general.

Although Côte d'Ivoire, Egypt, Madagascar and Nigeria suffered from crises or risks of political instability, they have made huge efforts to achieve good governance and economic recovery. Since the end of Côte d'Ivoire's 2010–2011 political crisis, the country has undertaken actions to improve governance, such as creating an Anti-Corruption Brigade and adopting a National Plan for Good Governance and Fight against Corruption (2013–2017). Yet the capacities of the public administration remain weak at both the central and local levels. There are persistent challenges for management and procurement as well as for the development, implementation, monitoring and evaluation of natural resources programmes and projects in Côte d'Ivoire. The rule of law remains weak because the capacity of the justice system and security forces to enforce the law is poor, owing to lack of independence, corruption and few technical and financial resources (Yoboué, 2016).

In Egypt the political instability that accompanied the Arab Spring hurt the economy. However, since 2011 the country has improved on many governance and economic indicators, reflecting reforms. The most important challenges are a decrease in Egyptian global competitiveness (from a ranking of 119 in 2015 to a ranking of 115 in 2017 (World Economic Forum, 2017), lack of resources, management and exploitation inefficiencies due to high bureaucracy and lack of security.

Since independence in 1960, Madagascar has had a liberal-democratic regime but faced socio-political and economic crises, which have led to four republics, each with a constitution. The last political crisis—2009–2013—slowed

development, and Madagascar was in a precarious financial situation that required it to heavily curtail financing of basic socio-economic services. Economic growth fell from 7.2 per cent in 2007/08 to a contraction of 3.5 per cent in 2009. However, growth started recovering slowly, at 0.26 per cent in 2010, to 4.2 per cent in 2016. In 2017 the poverty rate was 90 per cent, and the food insecurity rate was 33 per cent (WFP, 2017).

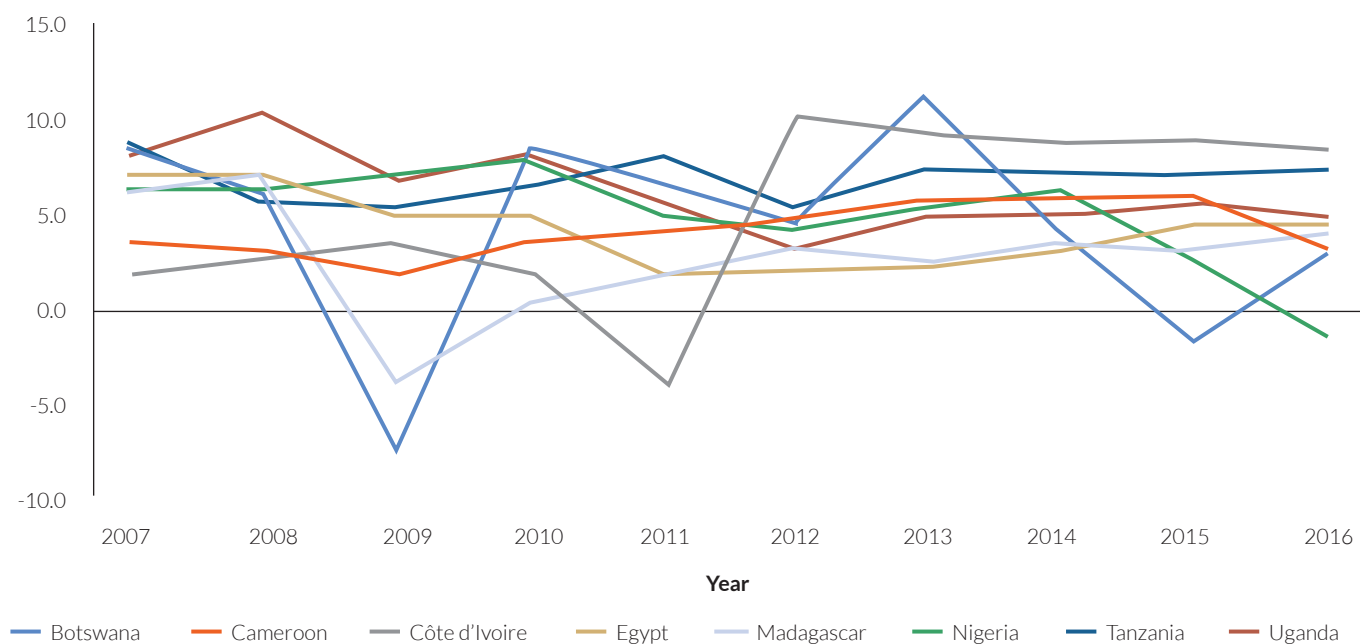
Nigeria is a political federation of 36 autonomous states, with a multi-ethnic and culturally diverse society. It is the most populous African nation—about 186 million in 2016—with about 47 per cent of West Africa's people. Despite its abundance of natural resources (it is Africa's biggest oil exporter and holder of the largest reserves of natural gas), 67.1 per cent of its population remains impoverished as of June 2017.²³ Although its overall governance score on the Ibrahim Index of African Governance improved 2.5 points from 2006 to 2015,²⁴ the

country still struggles with good governance, owing to structural and social factors as well as threats from violent extremism (such as Boko Haram) and from radical groups in the oil-rich Niger Delta region.

5.1.2 Economic and social context

Although the eight countries' GDP growth averaged 4.2 per cent in 2016, higher than the 2.2 per cent for Africa as a whole (Figure 5.2), the proportion of people living below the poverty line—\$2 a day in purchasing power parity terms—ranged from 18.2 per cent (Botswana) to 81.8 per cent (Madagascar) (Figure 5.3). Botswana's low share is attributable to the country's positive macroeconomic fundamentals, due to a stable environment, fiscal discipline, a well-capitalized banking system and a crawling peg exchange rate system.²⁵ Despite high dependency on mineral revenues, it has a countercyclical fiscal

FIGURE 5.2 Real GDP growth in eight selected countries, 2007–2016 (per cent)



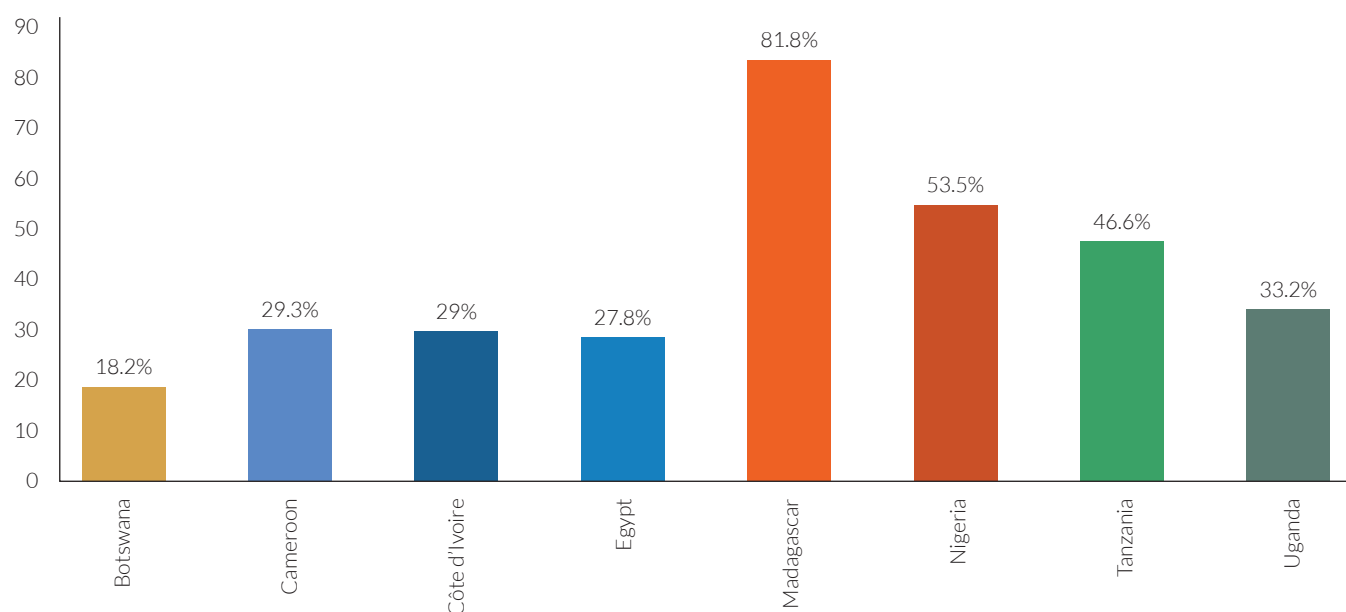
Source: ECA (2017).

23 Nigeria National Bureau of Statistics website (<http://www.nigerianstat.gov.ng>).

24 Ibrahim Index of African Governance website (<http://mo.ibrahim.foundation/iiag/>).

25 United States Agency for International Development website (<https://www.usaid.gov/botswana>).

FIGURE 5.3 Share of population living below the \$2 a day poverty line in eight selected countries, 2016 (per cent)



Source: ECA (2017).

policy and maintains a low public debt ratio. Botswana's Human Development Index value of 0.698 is above the average for countries in the medium human development group (0.631) and the average for countries in Africa, south of the Sahara (0.523) (UNDP, 2016).

Madagascar's poverty incidence is much higher in rural than in urban areas, in part reflecting an urban bias of public policies and social safety nets. Although the government formulated a National Social Protection Policy in 2015 in response to social precariousness, poor funding has hamstrung the initiative. The budget deficit rose to 3.3 per cent of GDP in 2015 from 2.3 per cent in 2014 (IMF, 2017).

Nigeria's high poverty rate (53.5 per cent) can be explained partly by the recent decline in economic growth, from 6.3 per cent in 2014 to a contraction of 1.5 per cent in 2016, owing to the steep fall in oil prices. But the government has also had difficulties with effective wealth redistribution.

Egypt and Uganda also saw decelerating economic growth over the past decade. Although Egypt saw a pick-up in 2014–2016 to about 4.3 per cent, from 1.8–2.2 per cent in 2011–2013, growth is still

below the peak of 7.2 per cent in 2008. Uganda's growth averaged 8.4 per cent in 2007–2010, due to good weather and a rise in coffee prices, but slowed to 4.8 per cent in 2016, owing largely to more than 25 per cent depreciation of the shilling in 2015, coupled with a rise in inflation to 8.5 per cent by end-December 2015.

Cameroon and Tanzania are two relatively stable economies. Tanzania averaged growth of 6.8 per cent in 2010–2015 (7.2 per cent in 2016), making it one of the fastest growing economies in East Africa and reflecting strong performance in information and communication, public administration and defence, finance, and mining (ECA, 2015a). Agriculture is still the occupation of two-thirds of the workforce.

In Cameroon growth is projected to continue at 5 per cent in 2018–2021, having been steady at between 4 and 5 per cent in 2010–2016. Inflation was only 0.9 per cent in 2015. In 2014 foreign direct investment inflows were \$501 million, up from \$326 million in 2013 (ECA, 2015b). Foreign direct investment inflows to Cameroon, traditionally low compared with the potential of its economy, declined even further in 2016, to \$128 million, down from \$627 million

in 2015 and \$726 million in 2014 (UNCTAD, 2017). Although foreign direct investment was oriented towards oil, it is shifting a little to infrastructure.

A Almost all eight countries still have to reduce unemployment, mitigate vulnerability to external economic shocks and forge sustainable growth paths.

Côte d'Ivoire had the fastest average growth in 2012–2016: 9.1 per cent (after contraction of 4.2 per cent in 2011). Growth was fuelled by strong productivity growth in agriculture (which accounts for about 60 per cent of total exports); vitality in transport, trade and telephony; and a better business climate and macroeconomic environment.

Almost all eight countries still have to reduce unemployment, mitigate vulnerability to external economic shocks and forge sustainable growth paths.

5.1.3 Natural resource wealth

The case study countries have diverse natural resources bases. The extractive sector dominates two economies: Botswana's and Nigeria's. In 1985–2014 the mining sector (essentially diamonds) was the largest contributor to Botswana's GDP (averaging 31.7 per cent), the largest contributor to government revenues (averaging 47.6 per cent) and the source of most export earnings (Jefferis, 2016a). Over the last

two decades or so, hydrocarbons constituted over 70 per cent of government revenue and foreign exchange earnings in Nigeria. However, following the recent slide in the world price, oil's contribution to the economy dropped from about 40 percent of GDP to just under a quarter in 2017 (Nigeria National Bureau of Statistics, 2017).

Extractives are less important for the other six economies. In 2015 the combined contribution of the mining and oil sectors to GDP was about 5.2 per cent in Côte d'Ivoire (EITI Côte d'Ivoire, 2017) and 4.4 per cent in Cameroon,²⁶ and the contribution of extractives was less than 1 per cent in Madagascar²⁷ and Uganda (Uganda National Planning Authority, 2015b).

Exports of natural resources are significant for all countries (Table 5.1). The very high share of natural resource products in the total exports of Botswana and Nigeria reflects a lack of diversification. Cameroon, Egypt and Tanzania also have a relatively high concentration of minerals and oil products in their export composition. In contrast, Côte d'Ivoire, Madagascar and Uganda export mostly non-extractive, agricultural commodities (such as cocoa beans, coffee and vanilla).

Africa's biggest oil exporter, Nigeria, also has the largest natural gas reserves on the continent. In 2016 it exported an estimated \$36.8 billion worth of crude petroleum and \$7.2 billion worth of natural gas. Cameroon is endowed with key minerals including bauxite, cobalt, gold, diamonds, iron and uranium. It also has substantial hydrocarbons, including offshore oil deposits, and a pipeline transporting oil from Chad.

Côte d'Ivoire has rich and diverse natural resources, including diamonds, gold, manganese, iron ore, cobalt, bauxite, nickel, tantalum and silica sand. Its post-independence development strategies were oriented to agriculture, which in the 1990s accounted for more than 66 per cent of exports and employed about two-thirds of the labour force. With declines in world prices of agricultural products in the early 2000s, it started

26 Cameroon National Institute of Statistics website (<http://www.statistics-cameroon.org>).

27 Madagascar National Institute of Statistics website (<http://www.instat.mg>).

TABLE 5.1 Exports of the eight countries, 2016

Country	Total exports (\$ billion)	Top two export products (% of total exports)	
Botswana	7.32	Diamonds	Raw nickel
		88	3.2
Cameroon	4.73	Crude petroleum	Cocoa beans
		35	12
Côte d'Ivoire	12.7	Cocoa beans	Refined petroleum
		29	8.8
Egypt	22.4	Gold	Crude petroleum
		12	8.1
Madagascar	2.18	Vanilla	Raw nickel
		19	18
Nigeria	47.8	Crude petroleum	Natural gas
		77	15
Tanzania	4.74	Gold	Raw tobacco
		35	7.6
Uganda	2.31	Coffee	Raw tobacco
		19	5.1

Source: Authors' calculations based on data from the UN Comtrade Database (<https://comtrade.un.org/>) and Massachusetts Institute of Technology Observatory of Economic Complexity (<https://atlas.media.mit.edu/en/>).

transitioning from an agricultural economy to one based on mining and oil resources (Yoboué, 2016). In 2016 extractives accounted for 10.8 per cent of exports. Other major exports included cocoa beans (29 per cent); cocoa paste (6.9 per cent); and coconuts Brazil nuts, and cashews (together, 6.5 per cent).

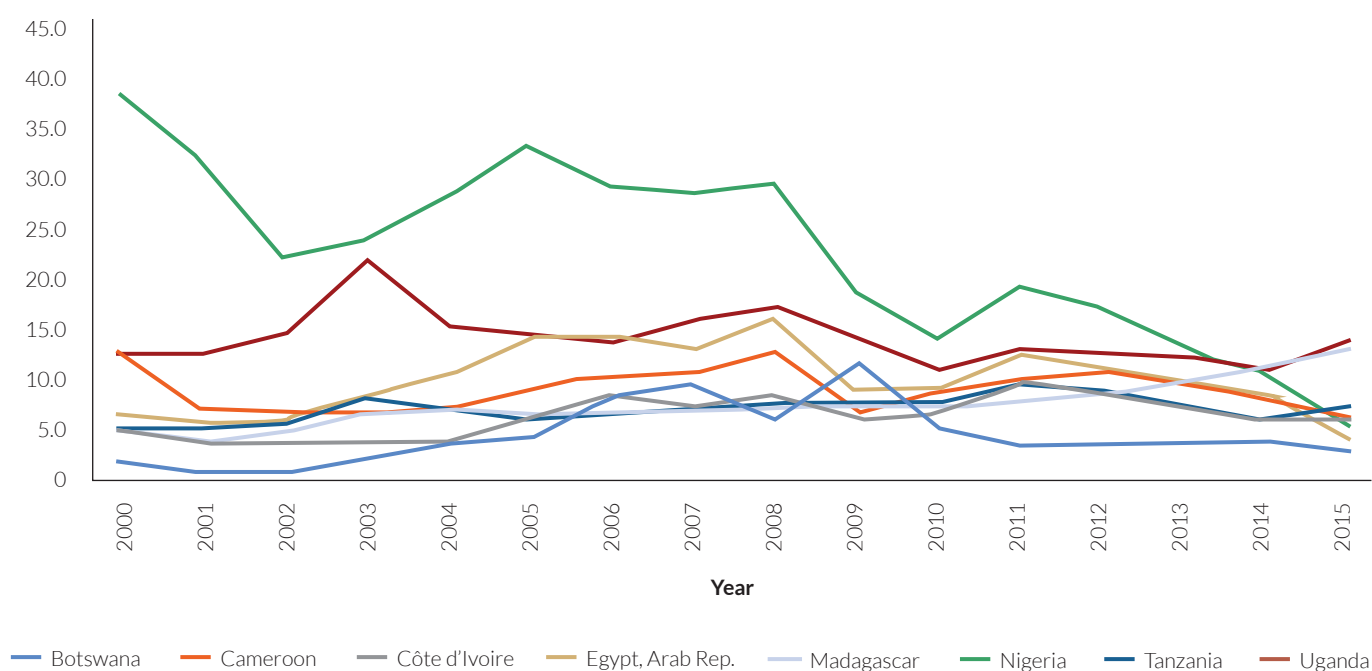
Madagascar's natural capital consists of extractive resources (nickel, cobalt, titanium, chromium, uranium, coal, ilmenite, precious stones, petroleum, heavy oils and dry gas) and renewable resources (agricultural land, grazing land, fisheries, forests and protected areas). In 2016 vanilla accounted for an estimated 19 per cent of exports, and raw nickel accounted for an estimated 18 per cent. In 2014 Madagascar's renewable natural resources accounted for nearly 92 per cent of the value of its natural capital stock,

estimated at about \$152 billion in 2014, or about \$6,500 per capita.²⁸ In Uganda services have dominated the economy in recent years.

The dependence of most of the eight countries on natural resources—seen in their relatively high share of natural resource exports in total exports (see Table 5.1) and the share of natural resource rents in GDP (Figure 5.4)—presents challenges for inclusive economic development and structural transformation. In many resource-dependent African countries, small elites control resource rents and fail to invest resource wealth in broad-based growth. In Nigeria natural resource rent as a share of GDP peaked at 38.2 per cent in 2000, but the country had one of the lowest GDPs per capita (\$2,258) (Figure 5.5). However, alongside the decline in the world

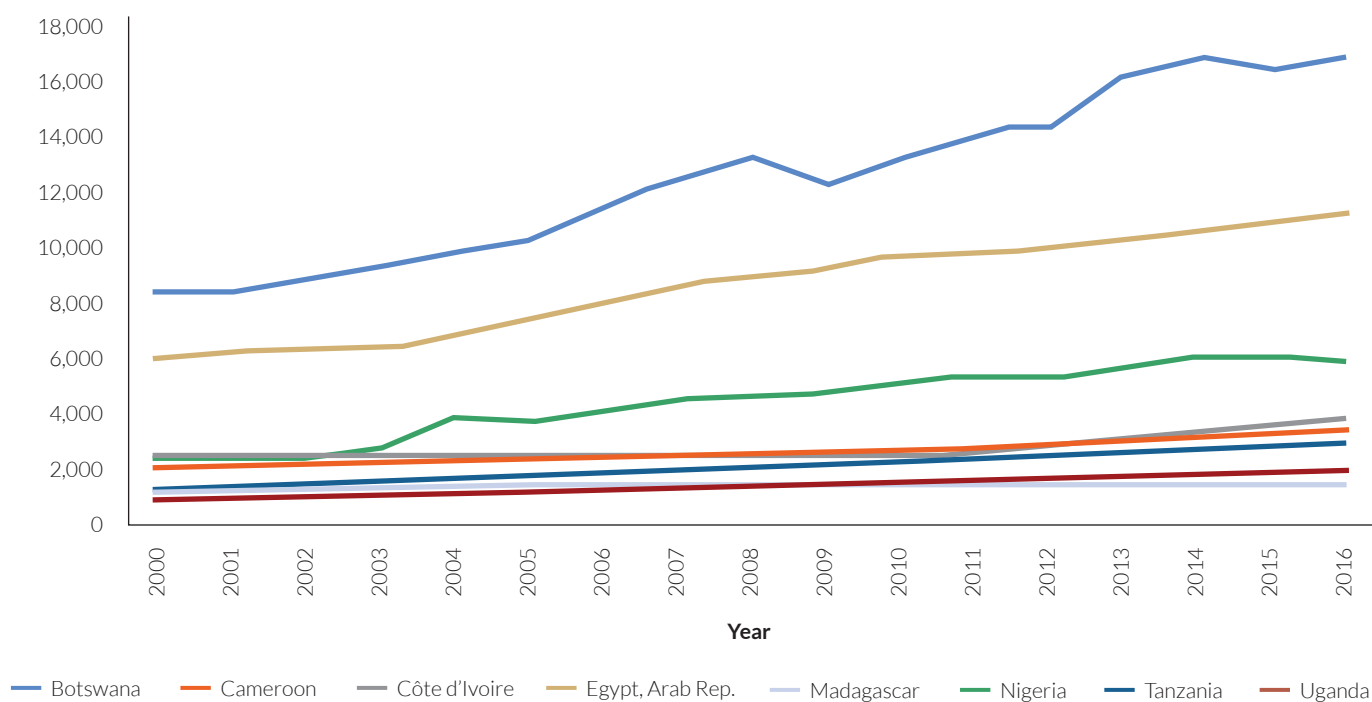
28 Madagascar National Institute of Statistics website (<http://www.instat.mg>).

FIGURE 5.4 Natural resource rent, 2000–2015 (% of GDP)



Source: Authors' calculations based on data from the World Bank World Development Indicators database (<http://databank.worldbank.org/wdi>).

FIGURE 5.5 GDP per capita, 2000–2016 (current \$)



Source: Authors' calculations based on data from the World Bank World Development Indicators database (<http://databank.worldbank.org/wdi>).

price of oil in recent years, which has had a huge impact on the country's natural resource exports and revenue, GDP per capita increased, which may reflect the country's renewed policies for economic diversification.

Egypt and Nigeria's over-reliance on natural resources—especially oil and gas—has exposed them to commodity price volatility.

While Egypt may appear to follow the same pattern, caution must be used in linking the influence of natural resource rents on growth and income to the socio-political crisis up to 2011. The decrease of such rents as a share of GDP since 2011 and the steady increase of GDP per capita coincide with the aftermath of the Arab Spring, which hurt the economy. However, since 2013 the economy has picked up, in the light of the reform policies implemented by the government.²⁹ These contributed to rebuilding confidence in the Egyptian economy at the domestic and international levels.³⁰

5.2

DEVELOPMENT OUTCOMES

Any correlation between the size of the natural resource sector and inclusive growth is not established in most of the eight countries. In Egypt and Nigeria such impact has been mixed. In Cameroon, Madagascar, Tanzania and Uganda the development and management of natural

resources have not translated into positive socio-economic outcomes. Côte d'Ivoire's resource endowment has even been associated with negative impacts, including economic decline, socio-economic deprivation, corruption, political instability and armed conflict. Given its effective mineral fiscal regime and revenues invested in development, Botswana was considered by some interviewers as a success story, although its high inequality raises questions over that success.

In Egypt and Nigeria policies have not promoted backward and forward links, which have been constrained in part by lack of monitoring and evaluation, slow budgeting and political interference in policy execution. The two countries' over-reliance on natural resources—especially oil and gas—has exposed them to commodity price volatility. Egypt sought to insulate itself against volatility by setting up stabilization funds to save some natural resource revenues, with the objective being to set aside money, especially during periods of high prices, to smooth spending when prices fall. Nigeria attempted to meet local content requirements—especially by the cement and construction industries. The government has passed local content rules and laws, such as the Nigerian Oil and Gas Industry Content Development Act, to build capacity among indigenous firms and boost local firms' participation in industry, which remains low, owing to lack of capacity to compete and the inability to meet industry requirements in services such as fabrication and construction.

In Cameroon the link between natural resources and development outcomes is controversial. Some of the persons interviewed in Cameroon commented that a few people have benefited from natural resources, particularly oil and gas. Others argue that it is quite difficult at this stage to establish any significant correlation between natural resources and development impact as the mining sector remains undeveloped and the country offers a relatively diversified economy and export base.

29 Egypt Ministry of Finance website (<http://www.mof.gov.eg>).

30 GDP growth in 2014–2015 was about 4.2 per cent, up from 2.1–2.2 per cent in 2010–2011 to 2013–2014.

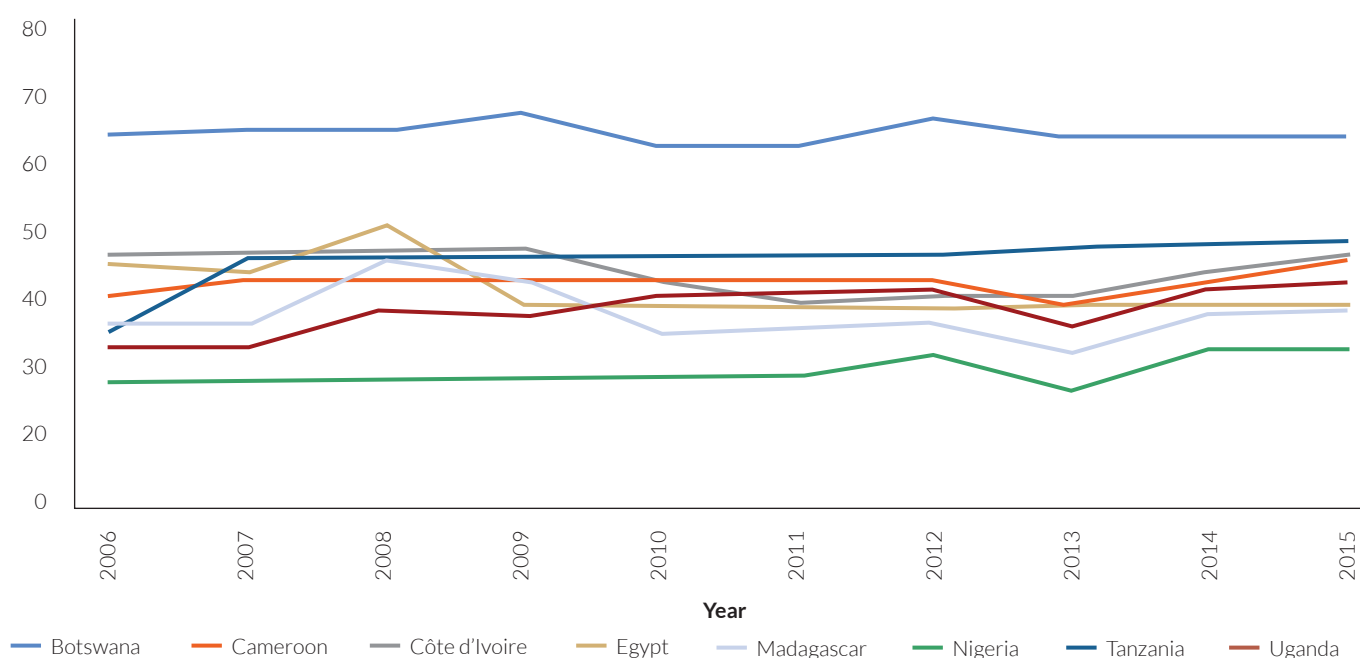
In Madagascar the economic and social spin-offs of natural resources have yet to result in a diversified economy, despite high revenue from extractives, estimated at \$27 million in 2016 (and they could easily increase to more than \$40 million a year with better collection of taxes and royalties and better management of revenue). The country is constrained by weak institutional capabilities and structural vulnerabilities. Political governance remains fragile despite improvements in the implementation of anti-corruption policy and the state's modernizing programme. Infrastructure is inadequate to generate energy resources required or to promote industrialization.

Some of the people interviewed in Tanzania believe that despite Tanzania's extensive natural resource endowments and the many years of natural resource exploitation, revenue generated by the sector has not matched the volume of natural resources leaving the country. The mining sector accounts for only 3.5 per cent of GDP,

although there are projections that it could reach 10 per cent of GDP by 2025 (Tanzania Ministry of Mining and Minerals, 2015). Extractive industries account for some 12 per cent of government revenue. Extractive sector revenues increased 28 per cent from \$602 million in 2013 to \$754 million in 2014, mainly because of higher gold production and corporate taxes. Most revenue from extractives is from taxes.³¹ There is a growing consensus that it is imperative for Tanzania to strike a balance between setting mechanisms for collecting a fair share of revenue from its natural resources and creating a conducive environment for business and investment.

Development outcomes of natural resources have been weak in Uganda, too. People living near the resources are often the poorest and are unhappy about the activities because their land is taken with very low compensation, they are displaced by force and infrastructure stays unchanged. Companies are almost self-sufficient, and locals are rarely

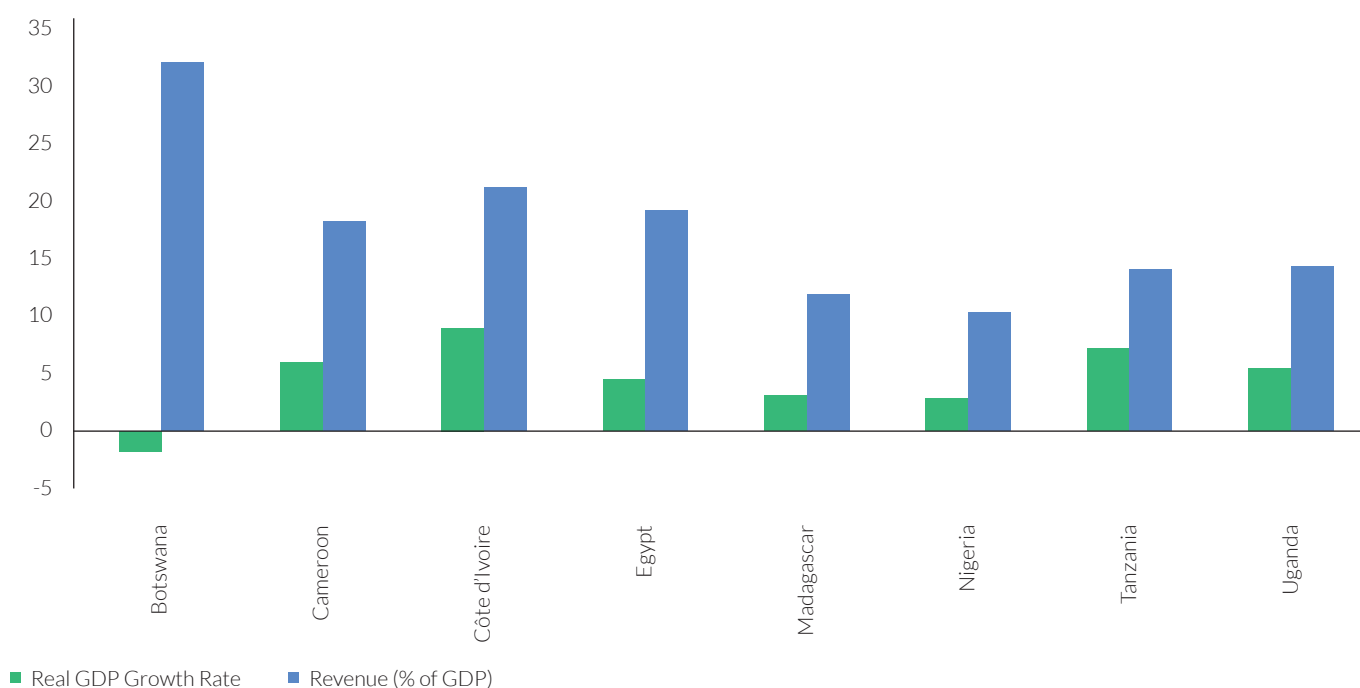
FIGURE 5.6 Pattern of domestic revenue mobilization, 2006–2015 (0, worst score in Africa, to 100, best score in Africa)



Source: Ibrahim Index of African Governance website (<http://mo.ibrahim.foundation/iag/>).

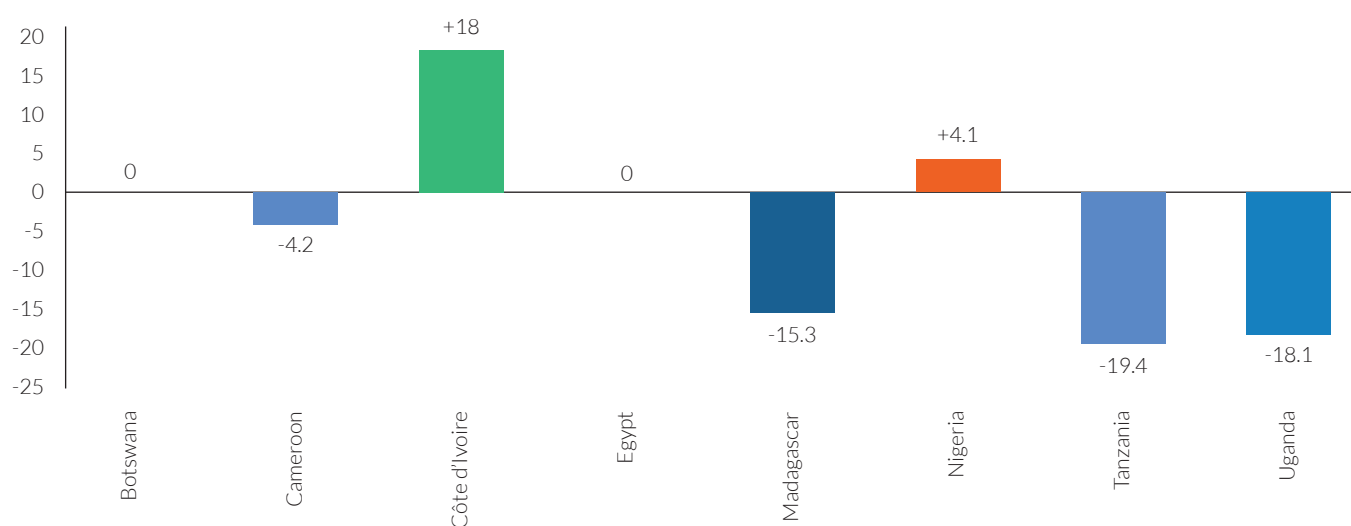
31 Extractive Industries Transparency Initiative, Tanzania (<https://eiti.org/tanzania>).

FIGURE 5.7 Tax revenue as a percentage of GDP and real GDP growth rate in eight selected countries 2015 (per cent)



Source: Authors' calculations based on data from ECA, World Bank World Development Indicators database (<http://databank.worldbank.org/wdi>) and the Ibrahim Index of African Governance website (<http://mo.ibrahim.foundation/iag/>).

FIGURE 5.8 Changes in budget management in eight selected countries, 2006–2015



Source: Authors' calculations based on data from ECA, World Bank World Development Indicators database (<http://databank.worldbank.org/wdi>) and the Ibrahim Index of African Governance website (<http://mo.ibrahim.foundation/iag/>).

employed. Still, the government has introduced a local content policy for oil, but it is weak in that it demands only that firms “prefer” Ugandan goods and services, employment and training of Ugandans, and state participation in oil production (OAGU, 2015).

According to the Mo Ibrahim Index of African Governance, compared to Botswana, the other seven countries show relatively lower levels of domestic revenue mobilization.

According to the Mo Ibrahim Index of African Governance, compared to Botswana, the other seven countries show relatively lower levels of domestic revenue mobilization (fig 5.6).³²

Botswana, Cameroon, Côte d’Ivoire and Egypt have recorded relatively high tax revenue to GDP ratios (Figure 5.7). However, most of the eight have weak capacity for credible budgeting, financial management and fiscal reporting. Figure 5.8 shows changes in budget management for 2006–2015 in the eight countries, with Côte d’Ivoire showing the biggest gain and Tanzania the biggest deterioration.

On the link between natural resources and development in Côte d’Ivoire, some government officials and non-state stakeholders believe that natural resources have been used to improve the well-being of Ivoirians. But others, including proponents of resource governance, tie the resource endowment to economic decline, socio-economic deprivation, corruption and personal enrichment, political instability and armed conflict. The argument that natural resources can be a factor contributing to conflicts, by motivating and

fuelling armed conflict, is a case in point, especially during the 2010–2011 political crisis.

Botswana manages to collect revenue from its natural resources (see Figure 5.7), and country consultations find that this ability stems largely from its administrative capacity and institutions. However, “Botswana’s experience also has some distinctive characteristics that make it more difficult to replicate; these include the very high rents entailed in diamond mining, and the fact that the bulk of that mining is done by one company, Debswana” (Jefferis, 2016b, p. 32). A major strength of the regime, inclusive of the Mining Act and Income Tax Act, is that the structure enables for high revenue mobilization from natural resources and for fair distribution. Another strength is a sliding tax formula, which adjusts to capture windfall profits when they are available, and allows write-offs, carrying them forward, during losses. Weaknesses are onerous licensing requirements and lack of tax incentives. On balance, however, the success of Botswana’s natural resource governance is partial, as it has focused largely on managing revenue and has yet to diversify the economy.

5.3

INSTITUTIONAL AND REGULATORY FRAMEWORKS

All eight countries have set up legal and regulatory frameworks that guide the exploration, sustainable development and management of natural resources, including revenue collection and distribution. In most of the countries, property rights and control of minerals, as well as natural resource protection, are vested in the government.

Most of the countries have legal pluralism, rooted in the nation’s history, ethnic groupings, customs, religion and the like, but multiple overlaps lead to legal regulations that can be competitive or even contradictory.

³² Ibrahim Index of African Governance website (<http://mo.ibrahim.foundation/iiag/>).

PLANNING FRAMEWORKS

All eight countries have national development plans with five-year action plans, as well as sectoral policies, though implementation remains a major challenge in most.

Botswana has pursued several medium- to long-term national development plans, with the current 11th National Development Plan scheduled to run until 2023. There is also a sectoral plan: the Ministry of Minerals, Energy and Water Resources Strategic Plan 2009–2016. This plan contains a range of provisions, including how to diversify the minerals sector and grow the minerals revenue streams. There have been achievements through this Plan: A mining investment company, the Minerals Development Company of Botswana, was established; the government-owned Diamond Trading Company of Botswana was established; industrial minerals assessment studies have been conducted, and beneficiation and value addition are being promoted. There is also a ministerial strategy for 2017–2023.

Botswana does not have an industrialization plan—which is a core of diversification and beneficiation efforts—but has policies and strategies. The current industrialization policy is a work in progress as related strategies such as the economic diversification drive have yet to yield intended results.

Cameroon is clear about its structural transformation agenda. During the second quarter of 2017 the National Strategy for Industrialization was still awaiting approval from the highest level of government, although it had already been validated through the national consultation process. Providing guidance on value addition and beneficiation, it promotes skills, technology development, research and development, and innovation. However, there are no clear local content policies.

In Botswana all minerals rights are vested in the Ministry of Minerals, Energy and Water Resources (Melaetsa, 2017). The exploration and exploitation of minerals are governed under the Mines and Minerals Act, first enacted in 1969 and revised in 1976 and 1999. Article 51 of the act specifies requirements in the licensing processes for all minerals and states that diamond-mining licensing requires a negotiated process between the applicant and the government.

In Cameroon the petroleum sector is under the supervision of the Ministry of Mines, Industry and Technological Development, which is responsible for crafting and executing policies, for managing and evaluating extractive resources and for monitoring. The sector is relatively open. Mining is still at an early stage. The government is seeking to develop and scale up the country's mining potential through capacity building of artisanal and small-scale mining operators and attracting foreign direct investment for large-scale production (Republic of Cameroon, 2009).

In Côte d'Ivoire the natural resource sector is regulated by national laws and framed by international and regional conventions. The country follows the Extractive Industries Transparency Initiative and the Kimberley Process Certification Scheme.

In Egypt, Madagascar and Uganda natural resource licensing and concessions are granted on a “first come, first served” basis, which may lead to bad governance or lack of transparency. In Egypt the solid-minerals regime has several African Mining Vision-type features such as security of tenure, the “use it or lose it” principle and a mining cadastre office vested with the authority to grant hydrocarbon and mineral licences and to recognize artisanal and small-scale mining. But the regime is weak in promoting and enforcing participation and rights of host communities, ensuring the transfer of skills and appreciating the unique circumstances that artisanal miners find themselves in and is seemingly too generous to foreign investors, possibly at the cost of revenue returns to the state.

Since the end of its political crisis, Côte d'Ivoire has strengthened security and stability, made an economic recovery and implemented institutional reforms, supported by its National Development Plan 2012–2015. Continued efforts to consolidate these gains are being made under the National Development Plan

The planning of natural resources has many gaps in the eight countries. Some of the main challenges are lack of basic data on natural resources, making it hard to track output, exports and taxes due and to lay the basis for planning.

2016–2020, which aims to transform Côte d'Ivoire into an emerging country with a strong industrial base by 2020. The National Development Plan emphasizes the “consolidation of the development of the mining sector, notably through the simplification of procedures for the acquisition of permits, the securing of the mining cadastre and the facilitation of the development of local subcontracting”.

Egypt has a long-term plan and vision, as well as a number of sectoral medium-term development plans. The Sustainable Development Strategy: Egypt Vision 2030 establishes a development march towards an “advanced and prosperous nation dominated by economic and social justice” through sustainable development, social justice and balanced growth. The sectoral development plans for natural resource exploitation focus on job creation, revenue gains, and economic diversification and the like.

Madagascar's National Development Plan 2015–2019 aspires to sustained and shared economic growth that enables society to be resilient to external

shocks using different types of natural, human and productive capital in an inclusive, integrated and sustainable manner. To finance it, the government developed the Internal Resource Mobilization Strategy 2016–2030, grounded in five axes, of which the third focuses on natural resources: “Natural capital, well governed, exploited, used rationally and effectively to tackle illegal financial flows”. There are also sectoral policies, such as the national policy for diversifying the extractive sector, which is reflected in reform policies targeting private investments.

Nigeria has a long-term plan and sectoral medium-term plans. The Economic Recovery and Growth Plan captures the long-term vision, concretized by the Roadmap to the Growth and Development of the Nigerian Mining Sector. The country has several autonomous planning bodies, given its federal constitution. The development plans focus on job creation, revenue and economic diversification and in recent years have widened consultations with host communities. Nigeria has recently identified what it describes as “seven big wins” needed to make dramatic policy shifts in the natural resource sector. The 2017 Oil and Gas Policy aims to diversify gas-supply options to ensure security of supply and clarify investment rules.

Tanzania has a long history of planning, dating back to the immediate post-independence years, including the Arusha Declaration in 1967. Its current Development Vision 2025 aspires to have the country transformed into a middle-income and semi-industrialized nation by 2025.

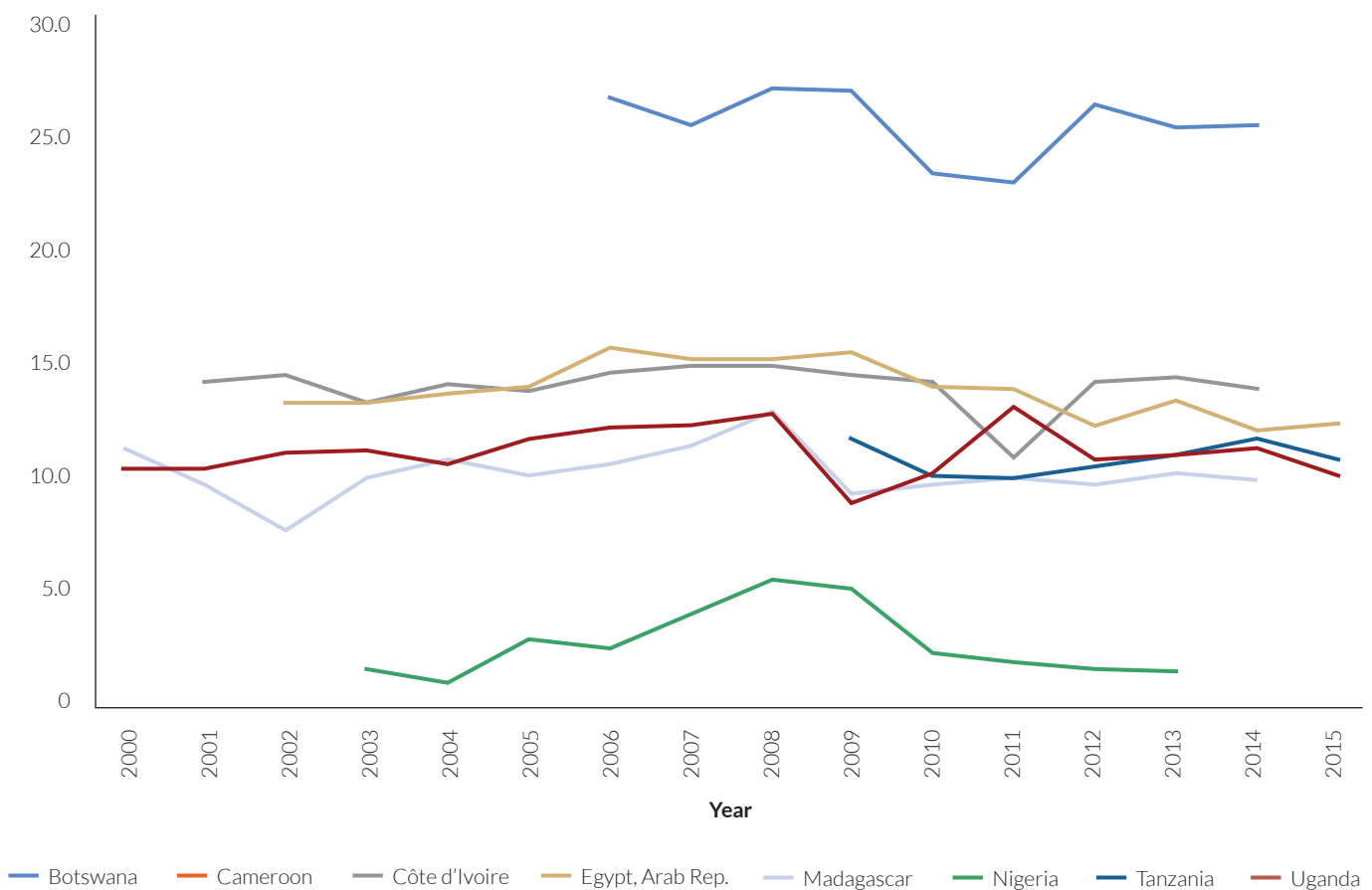
Finally, Uganda, like the other countries, has engaged in planning in recent years. Vision 2040 provides the overall guiding framework to transform the country from a peasant economy to a modern and prosperous country by 2040 (Uganda National Planning Authority, 2015a). Vision 2040 and National Development Plan II explain that the revenue from oil and gas will be used for infrastructure development. The plan prioritizes extractives as drivers of development.

REVENUE-SHARING ARRANGEMENTS

The planning of natural resources has many gaps in the eight countries. Some of the main challenges are lack of basic data on natural resources, making it hard to track output, exports and taxes due and to lay the basis for planning. Even though local governments have their own plans, most local communities are side-lined. And items are often given different planning jurisdictions.³³ These still-to-be-plugged gaps slow resource development.

The eight countries have their own approaches to sharing revenue, but most record their revenue collected from natural resources in their national budget. By sectoral or regional distribution of the

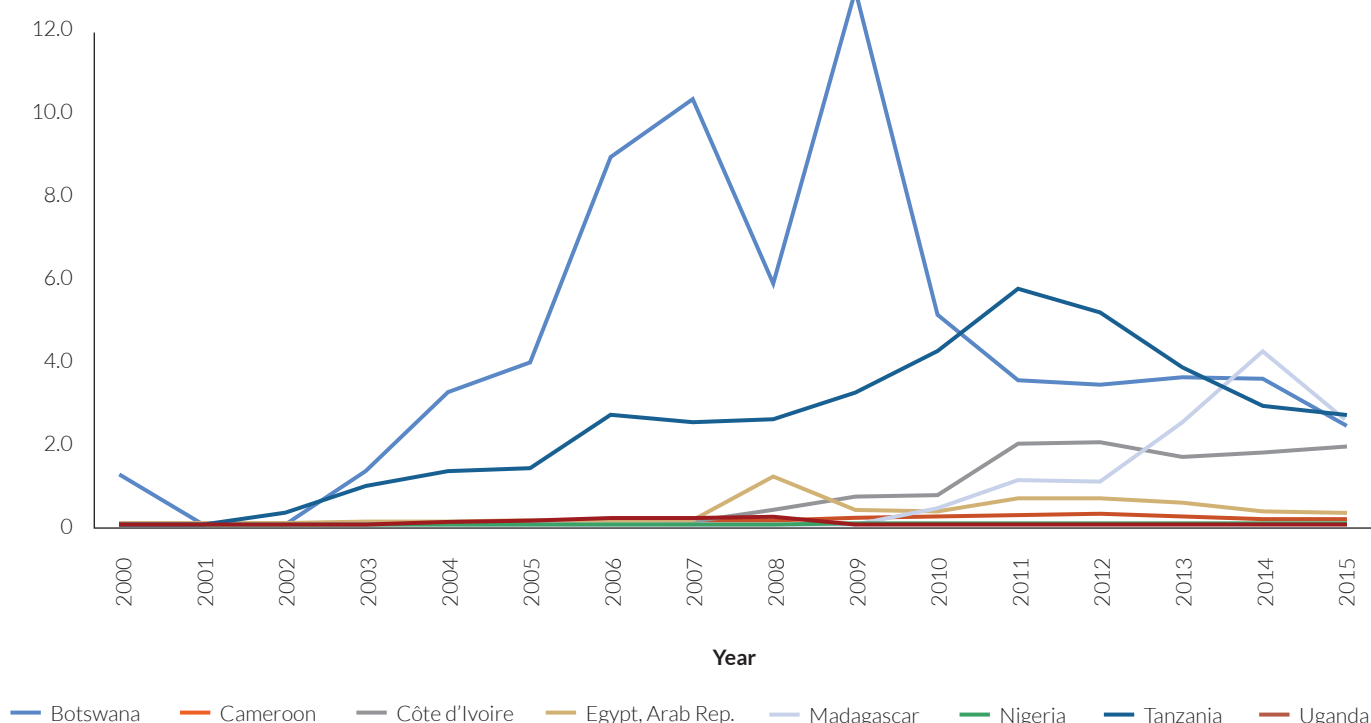
FIGURE 5.9 Pattern of tax revenue as a percentage of GDP in eight selected countries (2000-2015)



Source: ECA staff.

³³ For example in Nigeria, depending on whether items are on the exclusive, concurrent or residual lists of the Constitution. Natural resources are on the exclusive list, so local government institutions have less role in the planning process because decisions on items on that list are reserved exclusively for the central government. This means that only the central or federal government can legislate—interference by the regional or state governments on items in the exclusive list can be declared void.

FIGURE 5.10 Mineral rent as a percentage of GDP in eight selected countries, 2000–2015 (per cent)



Source: ECA staff.

extractive revenues, in most countries spending depends on the tax nomenclature defined in the finance law and on the priority actions identified in the National Development Plan. However, most countries have some room to step up to the plate on good governance, transparency and accountability in the equitable distribution of revenues.

Some of the countries have explicit legal or regulatory frameworks on allocating mineral revenue to spending, investment and saving. Others channel the mineral revenue directly into segregated funds, whether for short-term parking or long-term investment. Most such funds have rules on drawdowns or withdrawals and on inflows (Jefferis, 2016a). Figure 5.9 and Figure 5.10 show the tax-revenue and mineral-rent trends as a share of GDP in the countries. One pattern stands out: on both trends, Botswana leads, Nigeria lags.

In Botswana, mineral revenues are not institutionally segregated but are paid into the general revenue pool (the Consolidated Fund at the Bank of Botswana).

Guidelines relate to spending the share of total revenue derived from minerals, but there is no statutory basis underpinning them. Revenue is stated by type of mineral, not by mining firms' financial statements. Usually, a note is sent to the Ministry of Minerals, Energy and Water Resources and the Ministry of Finance and Development Planning when revenue is deposited at the Central Bank. The Pula Fund is another best practice in Botswana as a vehicle for managing revenues from natural resources. It was created in 1994 from diamond revenues and is the oldest and largest such fund in Africa. Essentially, all revenue collected from natural resources goes into the Consolidated Fund at the Bank of Botswana.

In Cameroon, various stakeholders' interviews found that revenue collected is placed in the national treasury, which matches collection by the tax administration with receipts in the banks and then certifies confirming receipts received from payees. Revenue from the extractive sector is also recorded in the national budget. All the revenue is centralized for distribution through

the annual budget. Some of the interviewers advanced that there is no parliamentary committee to review reports on resource revenues, but there is one on the budget.

Côte d'Ivoire has a contrasting practice: the law requires the government to publicly disclose data on revenue payments from extractive companies to the government, and this practice seems satisfactory.³⁴ However, the national tax authority is not required to audit extractive companies or to periodically be audited by an external body, which offers scope for corruption.

The major issues in Egypt's natural resource governance include insecurity in ownership and exploitation rights and the lack of subnational revenue sharing. In addition there are the weak links with security, health and emergency planning clusters, given that most mining is in remote areas. There is also limited public access to information on legislative processes in the sector and few capacity-building programmes for civil society organizations and local communities. Overall, there are concerns about governance, transparency and accountability.

In Madagascar tax, customs and other direct payments from the extractive sector are paid directly into the Public Treasury Account. These resources are reallocated to state entities according to the Finance Law of 2017 and the priority actions identified in the National Development Plan. The allocation rates for mining administration fees, mining royalties and patronage dividends are set by the Mining Code.

The policy and legal framework for Nigeria's fiscal management is anchored on the mechanisms established under the Constitution as well as the Fiscal Responsibility Act of 2007. That act provides for the prudent management of the nation's

resources to ensure long-term macroeconomic stability. It aims at securing greater accountability and transparency in fiscal operations within a medium-term framework and requires any analysis of the fiscal regime for extractives to observe the overall fiscal management regime.

Tanzania has, at different periods, launched natural resource governance reforms to make its natural resource wealth contribute more to development. The most far-reaching reforms were in the mid- to late 1990s, during the transition from a socialist to a liberal-market economy under the liberalization prescriptions of the International Monetary Fund and World Bank. The envisaged development outcomes failed to materialize, however. Public dissatisfaction with the failure of these reforms compelled the government to introduce a different type of reforms from 2010 onwards so that the country received a fair share in extractive revenue. These later initiatives also encouraged value addition and forward and backward links between natural resources and other sectors.

In Uganda, the law requires that all revenue from natural resources recorded in the national treasury (unlike previous periods, when revenue collected by the Wild Life Authority and from tourism were used directly without being sent to the treasury). However, some of the stakeholders that were interviewed argued that much of the revenue is still lost to corruption and weak law enforcement. Though not explicit, revenue from mining is recorded in the national budget, except revenue from oil and gas, which goes into the petroleum fund. The petroleum fund is not part of the recurrent budget but will be used for infrastructure development. The Public Financial Management Act of 2015 stipulates the revenue share with local governments.

34 Natural Resource Governance Institute website (<https://resourcegovernance.org>).

CONCLUSIONS

Most experiences of natural resource decentralization in Africa show the inherent difficulty of institutional reforms that increase local authority and tenure over resources (Batterbury and Fernando, 2006), and these eight countries are no different. Almost all have legislation and planning for the natural resource value chain. Botswana and Nigeria have decentralized arrangements.³⁵ The major constraints on change in all cases are the interests that circumscribe society and the incentives that group interests generate in policy formulation and implementation. In an attempt to circumvent some of these challenges, Cameroon, Côte d'Ivoire, Nigeria, Tanzania and Uganda, like many other African countries, have signed up to regional and international natural resource governance frameworks.

In most of the eight countries the state wields huge power over natural resources. Even where state authorities claim to operate in a decentralized manner, as in Botswana and Uganda, this functionally meant concentrating fused executive, legislative and judicial powers in externally recognized local authorities. This alienation of local populations over natural resources had incited resource conflicts in the Niger Delta of Nigeria (oil exploitation) and Amuru in Northern Uganda (land), among other places. The experiences of Cameroon and Nigeria seem to validate the idea that ethnic fractionalization in Africa's governance has resulted in some commodity-led growth without inclusion and without real moves to democracy (Mamdani, 1996).

Natural resource governance remains centralized in most of the eight countries, influenced by the colonial legacy, elite interests in controlling valuable resources and associated discretionary authority, and patterns of commercial trade and investment. Some of the interviewed experts argued that reforms intended to devolve or decentralize rights over resources to the local communities are frequently stymied by powerful actors' interests, resulting in or being driven by weak accountability mechanisms. Such obstacles to local natural resource rights and ownership leave local communities, conservationists, state authorities and development agencies searching for measures—well implemented, well enforced—that deliver reforms essential for more equitable resource governance arrangements and sustainable development outcomes.

35 Even though the levels of delegation in Nigeria depend on whether the natural resource is on the exclusive list.



6

**Towards A Natural
Resource Governance
Policy Framework**

Effective governance, including proper long-term planning of the management of Africa's diverse natural resources, is a prerequisite for improving the well-being of millions and for serving as a basis for the long-term transformation of the continent's economies. However, empirical and theoretical evidence point overwhelmingly to the fact that Africa's natural resource sector has been one of the most poorly governed, with activities unguided by any inclusive, rigorous or sustained long-term planning.

Most resource-rich African countries continue to extract and export natural resources in their raw form, adding little or no value. The result is that unemployment, socio-economic inequalities and the levels of poverty appear to have increased during commodity booms and busts, alongside widespread environmental degradation (Elhiraika and Sloan, 2015). The share of revenues from the extraction and export of these resources generally remains low and volatile, while their use as inputs to manufacturing is also low relative to other continents, keeping natural resources in a marginal role in countries' moves to industrialize and structurally transform.

6.1

WHERE AFRICA IS NOW

Africa is heavily dependent on natural resources for productive activities, millions of people depend directly on these resources for their livelihoods and the revenue generated from the production and sale of these resources constitutes a large share of domestic financial resources that governments need for investing in development. Natural resources can spearhead industrialization and technological innovation upstream and downstream of the value chain.

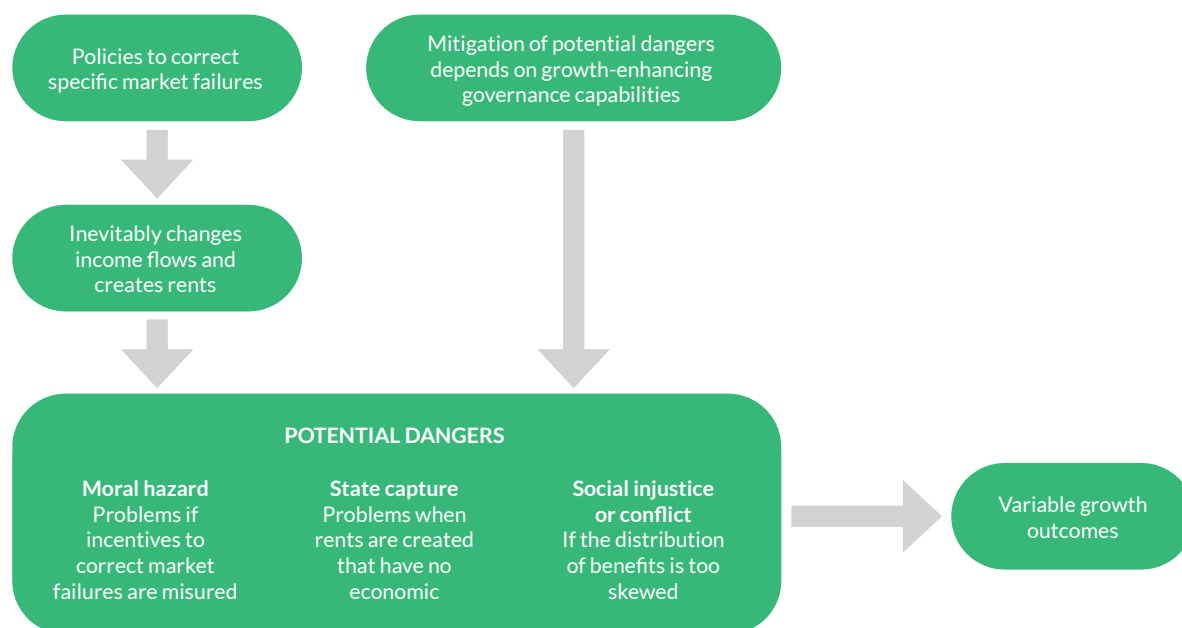
The boom and bust nature of natural resource dependence presents serious risks for African

countries' economies, as well as their politics and societies. But governments that act appropriately can harness resource booms to build human capital in the form of skills that form the basis of industrial development and to build reserves in stability funds and sovereign wealth funds that lessen the impacts of commodity price volatility. Governments can also invest in social development, strengthen political institutions and enable a middle class to flourish. Still, economic diversification remains the most secure way to mitigate the economic vulnerabilities inherent in primary-commodity dependence.

The channels by which natural resource abundance and dependence affect economic development are multiple, including macroeconomic impacts directly (growth, stability, revenue and employment) and indirectly (through their impact on the quality of institutions via rent-seeking behaviour and human capital accumulation). To transform natural resources into a boon thus requires effective governance and capable states.

The negative impacts of natural resource booms and busts are ultimately the result of market failure. Correcting these failures through policies or institutional reforms creates rents (defined as income flows that would otherwise not have existed without these corrective measures) (Figure 6.1). Rents need not be bad things—that is, injurious to welfare or economic growth. The fear is that actions that release rents may incentivize rent seeking of a wrong sort or influence allocation in harmful ways (such as capture by a powerful elite). Rents therefore need to be managed in beneficial ways. The key determinant lies in the capabilities of the agencies implementing the policies. In executing them, these agencies must be mindful of other dangers (such as moral hazard, state capture or inequalities). The critical capabilities are those necessary to diminish dangers to the economy and enhance growth. Governance capabilities by their nature can be developed only incrementally.

FIGURE 6.1 States' governance capabilities for addressing market failure



Source: Khan (2012).

The quality of institutions is a deciding factor on whether natural resource wealth becomes a blessing or curse for inclusive and transformational development, peace and security, deeper democracy and environmental protection. The quality of institutions governing revenue management shape the resource rent-sharing framework and the context in which these resources can be applied to development. But when institutions collapse or malfunction, the consequence may be disorder.

A mosaic of institutional structures, processes and actors characterizes Africa's natural resource governance landscape, with the extractive sectors having the most developed frameworks. For good natural resource governance, institutional actors cut across those in planning, revenue generation and management and in areas needed to foster links and bring about economic diversification. Their functions cover regulation and oversight, implementation and accountability. Oversight institutions, mainly (in theory) the legislature and its committees, are central to natural resource governance, particularly during the access and licensing processes, and revenue

accountability. The configuration of these institutions varies by country, but many of Africa's legislatures need to beef up their oversight of the executive. Many countries' regulatory frameworks also have weak or inappropriate national policies on business, investment in natural resources and environmental protection, with profound effects on mining licensing.

Planning is the first necessary capability for turning natural resource abundance into sustained prosperity for all, and good governance starts with a shared national vision. Long-term planning is particularly relevant in hydrocarbons and minerals because project cycles span decades.

Such national strategies are likely to be more successful if they are inclusive. Key to success are a coordinating agency that is highly placed, for example within the office of the presidency; a vision of how these resources fit into the development plan; and country benchmarking and capacity building, including identifying and strengthening governance capabilities. High-quality planning—when implementation is enforced well—improves the development outcomes of natural resources.

Although the continent has seen a revival of development planning, efforts still face a range of serious problems. While the actual physical location of planning authorities varies relative to the ministry of finance, these bodies share similar afflictions: disconnects between plans and budgets, an increasing tie-in to medium-term frameworks due to electoral cycles, little practical use of long-term plans, and absence of integration of policy planning with spatial plans (if such plans exist). Most planning authorities are poorly resourced and poorly staffed and have a low political profile.

The responsibility of governments in the governance of natural resource rents also includes how the resources are spent, invested and transformed into physical, social and human capital. Concerns over the efficacy of resource-sharing mechanisms in some African countries range from poor design to mismanagement of revenue transferred to subnational governments and shallow absorption capacity among recipient authorities, sometimes leading to corruption, regional inequalities or even conflict. There is now near-consensus that the distribution of revenues directly from natural resource exploitation over the past few decades was inequitable. For reasons ranging from poor fiscal and contractual regimes (including aggressive tax policies), weak institutions and corruption on the part of firms, as well as illicit financial flows, governments and local communities do not receive a fair portion of the revenues.

A **nother important concern of the impact of natural resource wealth is its association with deepening inequality.**

Another important concern of the impact of natural resource wealth is its association with deepening inequality. This inequality may be multi-faceted: national, gender, spatial or class oriented. This stems largely from rent capture by a small elite, and the

negative impact on motivation to invest in education and health (to benefit the majority). Such spending patterns may undermine the economy generally and sectors that generate sustainable jobs in particular.

6.2

POLICY RECOMMENDATIONS

African states need to adopt a developmental approach in the governance and management of natural resources, for which they have to be both capable of putting in appropriate policies and practices. And here governments often have to be pushed or enabled by pressure from civil society, by constitutional obligations (including the rights of people), by legal norms and regulatory frameworks and by international agreements. These provide the enabling conditions for transparency, participation and accountability of public decisions along natural resource value chains. But too many governments are constrained by weak capability, which covers, for example, the quality of the bureaucracy and its knowledge and skills (including negotiating skills), quality of development planning and of those plans' implementation, policy consistency, external dependency (which may constrain independent decisions) and the stage of the democratic transition (which may affect the space for civic action).

The following policy recommendations seek to address issues that affect such capability and willingness while minimizing the negative impulses identified in previous chapters.

6.2.1 Strengthening institutional and regulatory frameworks

To succeed in leveraging natural resource wealth for sustainable development and economic transformation, African governments should adopt and apply a broad definition of resource governance—encapsulating principles of transparency, accountability and impact on people and nature to underpin policy design and practice of

Governments should ensure that natural resource wealth promotes transparency, accountability and participation and translates into environmental protection and a better quality of life.

state institutions. Governments should ensure that natural resource wealth promotes transparency, accountability and participation and translates into environmental protection and a better quality of life. Specifically, countries need to:

- Invest in strengthening oversight institutions such as parliament and provide for participation of civil society in resource governance.
- Recognize access and ownership rights to natural resources such as land, especially customary interests. Registration of such rights and interests will go a long way in addressing tensions. The African Union Framework and Guidelines on Land Policy in Africa (2009) provides a supportive framework for governments, which African governments should apply.
- Enhance the capacity of state institutions to ensure effectiveness, efficiency and sustainability in managing natural resources. Given the centrality of institutions, the Africa Mining Vision and its Action Plan should be embraced by African countries as a matter of urgency.

6.2.2 Enhancing transparency and accountability in economic governance

Ensuring transparency throughout the decision-making chain (from information about resource

deposits to deal making, development, extraction, downstream value addition, and project closure and rehabilitation) facilitates government accountability to stakeholders. Thus the key to transforming natural resources into sustained prosperity is to build in transparency and accountability into this chain. For which, governments should:

- Urgently approve and use freedom of information laws. Transparency requires decisions to be taken and enforced in a manner that follows rules and regulations. It also means that information is freely available and directly accessible to those affected.
- Assure full disclosure of government information on natural resource issues and its use by the public.
- Be open about their actions and be ready to engage with citizens for their views, comments and input on natural resource governance.
- Ensure that the media is an essential player by assuring its independence.

6.2.3 Prioritizing and bolstering resource-based development planning

Resource planning should be an integral part of an inclusive national development plan complemented by decentralized planning, to which end governments need to:

- Renew long-term resource planning within the framework of national development planning to better manage the volatility associated with natural resource dependence.
- Establish coordinating agencies to enhance decision-making and strengthen the impacts of planning in natural resource governance.
- Invest more in capabilities, including those of statistical and geological agencies.

6.2.4 Fostering macroeconomic management and development outcomes

Mineral assets should be converted into assets—real estate, technology, skills and education, and long-term financial assets. To do so, governments ought to:

- Build their capacity to undertake risk analysis and to mitigate risks associated with revenue volatility. The use of innovative legal and financial instruments to mitigate, allocate and manage certain types of risks is crucial.
- Spend counter-cyclically to smoothen macroeconomic impacts of boom and bust and avoid unsustainable debt during a prolonged downturn.
- Apply foreign exchange earnings in the domestic market to fund public expenditure, using the wealth to cover foreign exchange needs; mobilize local taxes to fund local expenditure; and favour export diversification and the development of upstream and downstream industries.

Diversification and link strategies are necessary for industrializing through natural resource endowments, creating jobs and sustaining revenue generation.

6.2.5 Accelerating diversification and expanding links for structural transformation

Diversification and link strategies are necessary for industrializing through natural resource endowments, creating jobs and sustaining revenue generation. Governments should:

- Introduce policies to foster diversification and accelerate industrial development, channelling natural resource rents into developmental activities that add value. They should also channel domestic savings and revenue into productive investments, while being tough on corruption, inefficiency and waste.
- Use comprehensive resource-based strategies aimed at developing labour-intensive resources in upstream sectors, as well as going further downstream beyond capital-intensive intermediate goods into labour-intensive fabrication. This strategy can be national or regional and is likely to lead to successful import substitution and export diversification.
- Invest in specialized skills in engineering, chemicals, biology, and information and communications technologies and in broad-based human development.
- Devote funding to crucial soft and hard infrastructure, including logistical services and other areas, creating multiplier effects.

6.2.6 Promoting the domestic private sector

Enhancing the presence of local enterprises is an important element in diversification, as part of value chains linking enterprises in and among regional economic communities. Therefore, governments will want to:

- Target support measures in financing, technical advice, training and fiscal incentives, while fostering gender balance.
- Develop and implement local content policies to expand benefit sharing between foreign firms and local economies. Employment, subcontracting and the reservation of downstream services for local companies are examples of such initiatives.

6.2.7 Strengthening domestic revenue mobilization

Governments need to respond to several factors undermining domestic revenue mobilization from the natural resource sector. In more detail, they should:

- Ensure that domestic revenue mobilization decision-making follows the entire value chain. They should also increase cooperation on extractive fiscal issues and stop any race to the bottom in mutually destructive tax competition. Extractive sector fiscal regimes must be harmonized even more closely. The programme cluster of the Africa Mining Vision Action Plan on Mining Revenues and Mineral Rents Management contains an agenda waiting to be operationalized at the national and regional levels.
- Combat illicit financial flows through intra-African and global cooperation. Regional initiatives should support civil society campaigns for tax justice. Governments should also strengthen their customs to combat over-invoicing of imports and under-invoicing of exports. The Africa Mining Vision Action Plan has a programme cluster in this

area that has received little attention from African governments.

- Invigorate public financial management and accountability. The continent needs to develop processes for making decisions around public finances in ways that maximize the marginal social benefits while lowering the costs of fiscal policies.

6.2.8 Improving resource-sharing mechanisms

To stem deepening inequality and poor development outcomes in resource-rich African countries, governments should:

- Reform their resource-sharing systems to optimize revenues transferred to subnational governments, equitably, and improve absorption capacity by recipient authorities, to limit corruption, regional inequalities and potential for conflict.
- Improve distribution by strengthening fiscal regimes (that is, no aggressive tax policies), contractual systems and institutions and by combating corruption among all actors.

CONCLUSIONS

The policy measures needed for countries to convert these resources into sustainable development are vast and context specific. There are significant governance capacity development needs that will enable governments to ask the right questions and consider all the risks. This is an incremental process that is finessed through learning by doing. Countries have learned a great deal since the commodity super-cycle. The fact that macroeconomic imbalances are not out of control despite the current downturn testifies to this learning. This optimism, more than anything else, lends support to the view that it is in the power of African governments to prudently manage the risks associated with natural resource booms and busts in order to maximize development outcomes.

The challenge remains how to industrialize irrespective of natural resource wealth. One answer may be found in the recent elevation of agriculture as a priority sector across the continent.

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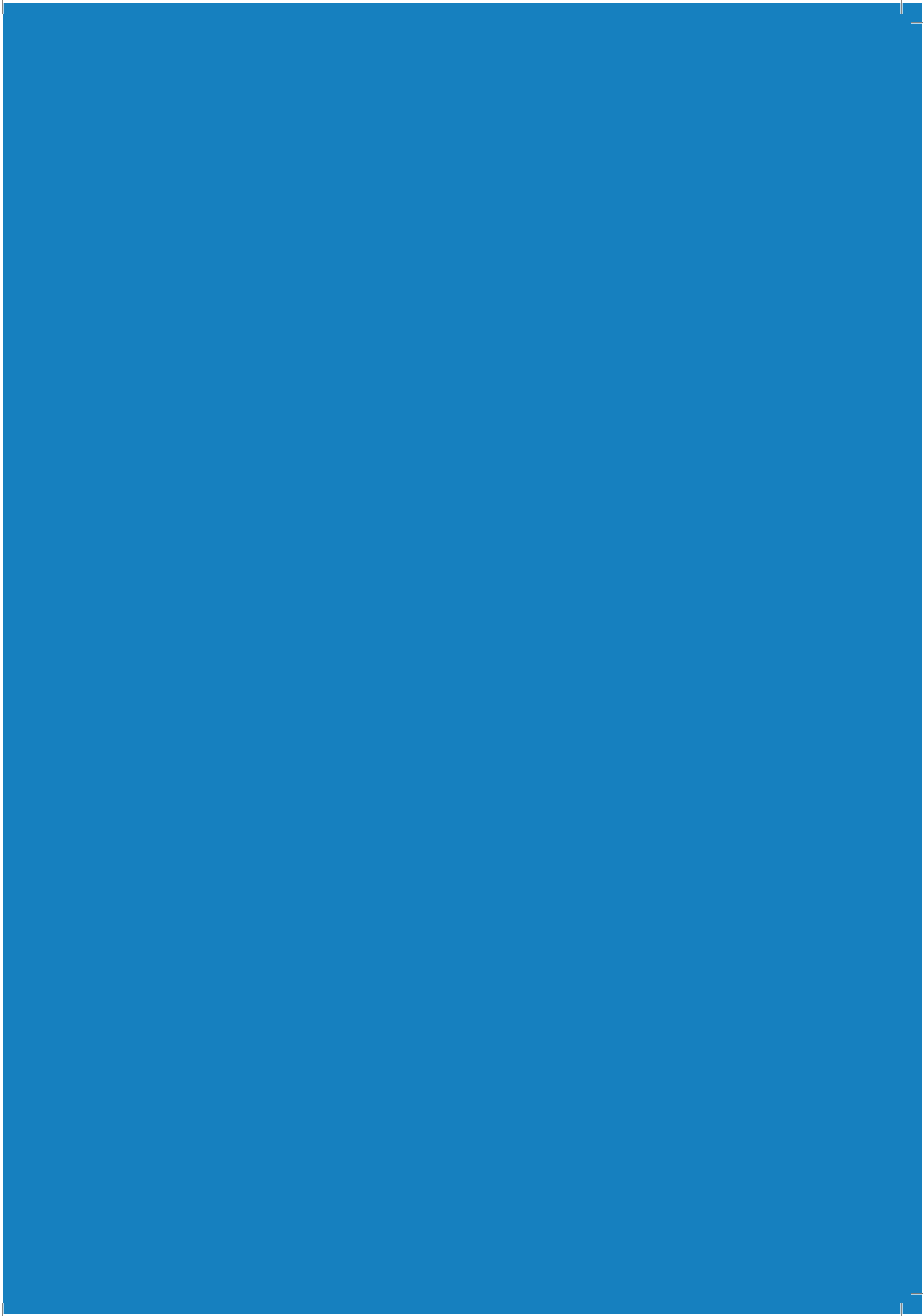
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