Financing Green Growth in Africa

Chapter 7

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7.1 Financial Requirements for Green Growth and the Cost of Inaction

How much does it cost to transition to green economies? This often becomes the central question in discussions about green growth. The reverse side of the question is: what will it cost the global economy if it continues with business as usual (BAU)? In other words, what are the costs of *growing first and cleaning up later?* Estimates of answers to both questions remain inconclusive in the literature. In terms of the former, the annual financing needed for transitioning to a green economy is estimated at the global level to be between US$ 1.05 trillion and US$ 2.59 trillion (UNEP, 2011a). In light of this substantial scale, there is often the implicit perception that transitioning to green growth might pose a constraint on development and poverty reduction, especially in developing countries. But the balance of empirical evidence suggests that the cost of inaction is ultimately higher than the cost of the green transition, at least in the medium to long term.

Climate change is one example within the broader scope of green growth which illustrates that the cost of inaction may ultimately be larger than the cost of action. The Stern Review estimated the annual cost associated with reducing emissions to stabilize greenhouse gas concentrations in the atmosphere at a level that would limit global warming at close to 2^0C (and hence avoid the most adverse consequences of climate change) to be around 1 percent of global GDP per annum (Stern, 2007). By contrast, BAU and the associated impacts from unabated climate change, such as declining agricultural production, heat waves, droughts, floods and other extremes, are estimated to result in costs of 5-20 percent of global GDP per year. Depending on the social discount rate, this estimate suggests that the cost of inaction could be higher than the cost of action by a factor of between 5 and 20[30].

7.2 Leveraging Financial Options for Green Growth

Recent studies suggest that green growth is necessary, efficient and affordable (e.g. World Bank, 2012a). After several years of global commitment to the principles of sustainable development, inclusive green growth now provides a practical model to reconcile the rapid economic growth required to address the needs of the increasing populations of the continent (including poverty reduction, employment creation, etc.), and halt further depletion of its natural capital assets. Through green technologies and innovations, training and skills enhancement, the bio-capacity of the natural assets (i.e. their productivity potential) and human wellbeing can actually be enhanced concurrently.

Green growth is a response to the contentious policy of *grow first and clean up later* (Beckerman, 1992; Dasgupta et al., 2002). That approach fails to address the fundamental concern that the current model of economic growth itself is at the root of both environmental harm and income inequality (Hueting, 1991). Again, evidence from global assessments shows that the global economy has outstripped its safe operating capacity in many biophysical sectors (MEA, 2005; Rockstroem et al., 2009; UNEP 2011a, 2011b), stressing the urgent need to act now before irreversible levels of harm are done to natural and social assets upon which human civilization depends. For example, under an average economic growth scenario and assuming no

30 Calculation based on Stern (2007).

efficiency gains, global demand to withdraw water would outstrip currently accessible water supplies by 40 percent by 2030. These stresses can be anticipated even if moderate progress is made in the transition to green growth. As the Report shows, a cost of 1 percent of GDP is projected if global warming is limited to 2 ^{0}C or less, but the timing and choice of mitigation actions will determine whether limiting warming to this level indeed remains a possibility (Rogelj et al., 2013). The same applies to other ecosystem services (MEA, 2005).

There are multiple pathways to green growth depending on stages of development, growth objectives, and other social and environmental circumstances of regions and/or countries. The pathways chosen by countries will define the scale and options for green growth financing. Lower income countries tend to have much smaller ecological footprints than middle and high income countries (WWF and AfDB 2012). On one hand, this means that less developed countries may be able to leapfrog to a green economy because they have lower sunk costs in the fossil fuel based economy than the industrialized countries. On the other hand, the resource and energy intensities of the least developed countries (LDCs) are also known to be much higher than those of industrialized economies (UNEP 2011b; IEA 2012).

For African countries, there are several strategies to finance green growth by focusing on (i) optimizing resource efficiency and productivity gains by greening value chains; (ii) reducing the fiscal cost of subsidies through realignment; (iii) leveraging global financing options for green growth; (iv) building targeted public-private partnerships; and (v) harnessing other fiscal and environmental policy tools.

7.2.1 Optimizing Resource Efficiency and Productivity Gains by Greening Value Chains

Considering the huge inefficiencies in the existing development infrastructure in less developed countries, it is clear that there are many financing options that can improve resource efficiency and productivity. For example, global investments of around US$ 90 billion in promoting energy efficiency in developing countries could provide US$ 600 billion in net savings (McKinsey and Company, 2010). Similarly, globally over US$ 18 billion worth of water a year is considered as non-revenue water (NRW) – as a result of leakage, private water sources, illegal connections and dysfunctional meters per year worldwide. In dysfunctional domestic water supply systems, NRW can range from 15 percent to more than 70 percent. This is hugely significant in a context where water demand outstrips current forms of supply, and where global government expenditure for upstream water supply at the global scale could increase from the current US$ 40 billion to US$ 45 billion per annum to around US$ 200 billion per annum by 2030, excluding distribution costs.

7.2.2 Reducing the Fiscal Cost of Subsidies through Realignment

Redirecting revenues from fuel subsidies is another financing option which could be explored by African countries. In 2010-11, over half of all African countries had some subsidy in place for fuel products, and these subsidies consumed, on average, 1.4 percent of GDP in public resources. Of the 25 countries with fuel subsidies, the fiscal cost of subsidies in six countries – primarily oil exporters – was at or above 2 percent of GDP in 2011. The fiscal cost for oil exporters was almost two-and-a-half times the levels observed for oil importers (World Bank, 2012b). The realignment of such subsidies would thus free substantial government money that could be used for green growth financing (see Chapters 5 and 8 for a further discussion on fuel subsidies).

7.2.3 Leveraging Global Financing Options

The financial resources for green growth will encompass many global financing options: Foreign Direct Investments (FDI), remittances, Official Development Assistance (ODA), and complementary finance for climate change adaptation and mitigation, biodiversity conservation, and other issues of environmental sustainability. Available finance through all these mechanisms has increased during the past decade, and will continue to increase in the near future.

FDI constitutes about 39 percent of the average annual external financial flows to Africa, with the majority concentrated in African countries with extractive industries.

In 2010, for example, extractive industries attracted 43 percent of FDI in Africa (AfDB et al., 2012). African countries should include green growth principles in their policies for FDI and extractive resources development. The factors promoting strong flows of FDI are very much consistent with green growth principles. These include clear industry and sector opportunities, appropriate structural and market-based signals, conducive macroeconomic policies, and a reliable regulatory environment.

Remittances, in addition to traditional forms of finance, can support inclusive green growth. Remittances represent 25 percent of the average annual external financial flows to Africa (AfDB et al., 2012). There is a strong indication that remittances may rise to a level comparable to ODA and FDI in the future. Because of their significant role in consumption and poverty reduction (Ratha and Maimbo, 2005), the potential should be explored for leveraging remittances for green and inclusive enterprise development.

ODA will continue to be a critical source of external financial flows, particularly for non-resource rich and low income countries in Africa. It represents 34 percent of the average annual financial flows from external sources to Africa. In particular, green ODA has increased over time (OECD, 2013).

There will also be the need for African countries to diversify the sources of ODA. Some emerging countries such as China, Saudi Arabia, Brazil and India are becoming key donors and development partners. African countries can take advantage of green growth strategies to diversify financing sources by attracting development cooperation flows from these emerging donors. African countries can also integrate aid effectiveness principles, such as those enshrined in the Paris Declaration of 2005[31] and the 2008 Accra Agenda for Action, with green growth principles of resource efficiency and inclusive growth to help develop and finance sound national green growth strategies (OECD, 2008).

7.2.4 Building Targeted Public-Private Partnerships

The engagement of the private sector will be essential in transitioning to green growth. With FDI increasingly exceeding ODA on the African continent, governments will need to provide the right enabling and regulatory environment for the private sector to invest in green projects in priority sectors, depending on comparative and competitive advantages of countries (for more on the enabling environment, see Chapter 8). Private sector resources include the assets or capital of financial institutions and market capitalization of both listed and unlisted companies. Taxes, incentives, and regulatory policies can be designed to attract investment into green technology and infrastructure, for example. In addition to strengthening the overall investment climate, targeted Public Private Sector Partnerships (PPPs) can help reduce risks that might discourage the engagement of the private sector in going green, thereby opening up new investment opportunities.

7.2.5 Harnessing Other Fiscal and Environmental Policy Tools

Most African countries have considerable domestic financial resources that could be mobilized through fiscal and financial policy to finance development while promoting the transition to green growth. This includes both public revenues and private sector resources.

Fiscal resources include taxes, fees and royalties. In 2010, domestic tax revenues in African countries amounted to US$ 416.3 billion, more than double the amount of the total external flow to the continent (AfDB et al., 2012). The challenge for African countries is to integrate green growth into fiscal policy measures.

Other environmental policy tools include green procurement, green bonds, micro-credit, weather index insurance, valuation/payments for ecosystem services, etc., in order to help promote resource efficiency and sustainable livelihoods. As discussed in Chapter 8, strengthening the enabling environment for green growth also requires improving the capacities of countries to monitor their natural asset base and assess the cost of environmental

31 Principles in the Paris Declaration include country ownership; alignment; harmonization; managing for development results; and mutual accountability.

degradation and pollution; this allows countries to make informed decisions about environmental regulations and taxation. The early involvement of the Ministries of Finance and Planning is key in order to ensure that green growth concerns are integrated into national budgeting processes and that adequate resources are mobilized.

7.3 The Way Forward

Green growth offers huge potential opportunities for self-financing through efficiency and productivity gains by greening value chains in African economies. However, financing the initial stages of the transitioning process to green growth will require ambitious policies, market incentive structures and regulatory frameworks to realize opportunities. Specific tools considered in this chapter include realigning subsidies in the brown economy; using fiscal policy measures and market-based instruments to generate a double dividend of addressing the environmental impact of growth and generating financial resources to finance green growth; and leveraging traditional financing mechanisms (including ODA and FDI) and emerging global funds for climate change, biodiversity and environmental sustainability.

Achieving this at the country level will require substantial local skills, capacity to design and implement appropriate policies. The available evidence on global financing mechanisms such as the CDM so far suggests exclusion of less developed countries, especially sub-Saharan African countries, due to high transaction costs, inappropriate public policies, and, perhaps most importantly, lack of local capacity to package bankable projects (Urama et al., 2012; Byrne et al., 2012). Generally, while the academic literature is massive and growing (often nuanced by regional perspectives, with a sharp division between the green technology producers in the global north and the consumers in the global south), the balance of empirical evidence suggests that these traditional market-based approaches are unlikely to deliver substantive transitions to greener economies in less developed countries, without ambitious environmental policies and their effective implementation.

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