

Growing Together, Growing Apart: Sustainable Development in the Global South

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Executive Summary

The **sustainable development concept requires each country to balance economic growth, social development, and responsible use of the environment**, measuring achievements through progress towards sustainable development goals (SDG's). A low-growth economic paradigm would mean decoupling growth from energy consumption through improved energy efficiency while reducing energy-related GHG emissions and eventually moving towards the deployment of low-GHG emission technologies. However, dematerialization and reduction in energy intensity of economic activity have together not been enough to compensate a massive rise in absolute volumes. Gains in efficiency are being cancelled out by increases in consumption. **Worldwide, consumer demand has followed economic growth and continues to do so.**

In 1992 as part of the Agenda 21 agreement **high income countries committed to transfer both funds and technology to assist low-income countries to adapt to climate change.** At the moment **there is a real scarcity of capital for adaptation measures in all sectors.** At the same time global production and consumption systems continue to externalize social and environmental costs to Africa.

For sustainable, inclusive growth African countries need better governance, investments in education, infrastructure, agriculture, and radical changes to the international economic and financial markets they operate within. The policy community, international development community and civil society actors have all welcomed **new multi-stakeholder partnerships that include the private sector and socially minded, entrepreneurial individuals in sustainable development.** Sustainable consumption and production of water, energy and food are necessary for socially fair economic development. African economies have grown due to commodity exports, better economic management and debt forgiveness. The number of stable jobs created has grown and poverty reduced in the last two decades. **However on-going conflicts still affect the stability of a number of African countries. Additionally, most countries in Africa lack the volume of investment - Foreign Direct Investment, Overseas Development Assistance, remittances, trade, and credit to transform their economies for sustained growth in quality employment or for the deployment of clean technologies.**

SDG target 17.15 speaks of an – **“alternative development model rooted in the [African] continent’s particular experience, one that represents a shift away from the unsustainable primary commodity export mode”.** Tax administration, transparency in the extractives industry and governance over extractives is weak on the side of African governments but also on the side of the countries who import commodities from Africa. Africa loses twice as much from fraud (corrupt practices) by international companies - unethical tax avoidance, transfer pricing and anonymous company ownership as it receives in international aid (ADB/GFI, 2013).

Institutions and leaders in Sub-Saharan Africa need to develop policies and strategies for water, energy and food systems in a “joined-up” way. At present commodity pricing and variability, energy policy and subsidies to agriculture in rich countries impact poor countries in a negative way. **Due to the impact of global economic forces on growth and income in poor countries attention should be paid to create a global economic and financial market environment that is compatible with growth and poverty reduction in all countries** (UNRISD 2010). Otherwise there is the risk of a widening gap between rich and poor people and regions and periodic or continuous crisis.

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Introduction

Prior to the emergence of the sustainability paradigm, the measure for development was economic. Development was a state project in which the government led social change through actions that increased economic growth. However, for many countries growth in Gross Domestic Product (GDP) did not lead to social progress as measured by increases in human wellbeing or reduced poverty. The Millennium Development Goals (MDG's) reflected a policy shift in favour of social development. Agenda 21, adopted in 1992 at the Rio Earth Summit, called on countries to develop indicators of sustainable development. At present, the **sustainable development concept requires each country to balance economic growth, social development, and responsible use of the environment**, measuring achievements through progress towards sustainable development goals (SDG's).

At present, what social, economic and environmental challenges are central to current and future sustainability in Sub-Saharan Africa? Which opportunities exist to address these challenges?

Challenge 1 – How will climate change affect Sub-Saharan Africans?

The majority of **Sub-Saharan Africans are dependent on natural resources** such as **agricultural land, fisheries, water bodies, and forests for their daily food and energy needs**. At the same time, **low-income countries confront** climate change: **“the major, overriding environmental issue of our time and the single greatest challenge facing environmental regulators”** (United Nations Secretary General, Ban Ki-Moon UNFCCC, 2014). Across Africa yields of important crops may fall by 30–40 percent once temperatures rise by 3 or 4° C (Stern Review, 2006).

Climate change has significant impacts on food production systems – unpredictable rainfall and periodic dry spells leave crops and livestock vulnerable to drought induced food insecurity (Rosengrant and Cai, 2002). Low-income countries are more vulnerable because of the greater weight of agriculture in their economies, the scarcity of capital for adaptation measures, their warmer baseline climates and heightened exposure to extreme events (Tubiello and Fischer, 2007). Sub-Saharan Africa is expected in some models to be worst affected, meaning **the poorest and most food insecure region in the world is also expected to suffer the greatest reduction of agricultural production and income**.

Opportunity 1 – Technology Transfer

In 1992 as part of the Agenda 21 agreement **high income countries committed to provide sustainable production methods, practices and techniques to low-income and middle-income countries**. High-income countries are to **transfer both funds and technology to assist low-income countries to undertake mitigation action and to adapt to climate change**. The conditions for transfer are well described and mechanisms for technology transfer exist. **Target emissions reduction can be achieved with current infrastructure as long as low-carbon technology can be deployed at scale with existing technology (GTF Key Findings 2015)**.

Opportunity 2 – Financing climate solutions

At the moment **there is a real scarcity of capital for adaptation measures in all sectors**. In agriculture socially sustainable alternatives to farming, off-farm rural employment, and entrepreneurship are necessary but all such measures need financing. In order to develop all productive systems sustainably and minimise damage to the environment, **African countries need to extend access to energy, and to improve energy efficiency across the energy supply and delivery chain** (AGECC 2010).

In the energy sector at present annual levels of investment in infrastructure are significantly below what is required to meet the 2030 target of sustainable energy for all (GSDR, 2015). **At USD 9 billion per year global investments in access to energy, energy efficiency and use of renewable energy are currently very much below the USD 49 billion required to meet the targets set by 2030.**

In Sub-Saharan Africa payment for ecosystems services (PES) are an underexploited opportunity. Although the “polluter pays” principle has been established, PES schemes are restricted to carbon storage (van Noordwijk et al., 2010). Markets are insufficiently developed, knowledge intensive, monitoring and evaluation mechanisms do not fit the local context and there are few buyers. Therefore PES is only very slowly being taken up in low-income countries of Africa.

Opportunity 3 – Enabling governance frameworks

African countries need to create enabling governance frameworks for climate adaptation and mitigation. Useful policy actions would regulate food prices and support climate- friendly food production systems, accompanied by land-use policies with enough scale to mitigate climate change (UNDP, 2007). As well, increasing food energy efficiency would increase food supply while protecting the environment. This could be done through reducing post-harvest losses and recycling.

While middle-income countries like Angola, Botswana and South Africa are ahead in strategy, regulation, investment, and production of clean energy technologies, most other African countries are still to arrive at pilot stage. In these circumstances it is difficult to see how sustainable economies can be achieved in the low-income countries.

Challenge 2 – What is the “Big Deal” about energy access?

“Sustainable Development Goal 7 -- "Ensure access to affordable, reliable, sustainable, and modern energy for all" -- recognizes that energy underpins progress in all areas of development. Important connections exist between **having access to sufficient, stable, affordable water and food on the one hand, and having reliable, affordable and sufficient energy on the other.** The water-energy-food nexus concept describes links between the systems for producing and supplying water, energy and food. Energy is used for water supply; energy is used directly in agriculture while water is used in energy supply and agriculture. Energy systems affect other key areas of development— access to clean water, sanitation, schooling, transport, cooking, heating, lighting, communication and production.

Africa is the region with the highest energy deficit. In 2011 Sub-Saharan Africa 31.8 percent had access to electricity. 599 million people did not. Remote and rural areas are particularly underserved. By contrast 77 percent of people in all developing countries together, had electricity. Access to non-solid fuels has fallen behind population growth in Sub-Saharan Africa. Growth in access to clean cooking fuels is concentrated in urban areas. Rural people are using

inefficient, unhealthy solid fuels that also add to deforestation. A 1.7 percent increase per year is needed to meet the SDG Goal target for energy access growth by 2030 (GTF, 2015). At present this increase does not seem likely to happen.

Opportunity 1 – National Energy Governance

Sustainable consumption and production of water, energy and food are necessary for socially fair economic development. A coordinated approach requires **institutions and leaders in Sub-Saharan Africa to develop policies and strategies for water, energy and food systems in a “joined-up” way.** Roughly 50 percent of Sub-Saharan African countries either do not yet have policies to promote the development and deployment of renewable energy technologies, or that information is as yet not disseminated (REN21, 2014). This is a potential opportunity as in developing countries; **access to energy, energy security, and industrial development can be key drivers for renewable energy policy and action.** Greater coherence reduces trade-offs and increases efficiencies in resource use. Deploying renewable energy technologies instead of conventional fuel infrastructure would reduce air pollution and GHG emissions, support new industries, and help create new jobs.

Enabling conditions for sustainable energy production and consumption are: regulatory policies with fiscal incentives and targets for specific fields and technologies, renewable energy schemes, urban planning, building codes, incentive programs, funds for demonstrations, electric utility policies like feed-in tariffs, competitions and awards, or funding for urban development that explicitly incorporates renewables.

Standard pathways are to establish and strengthen institutional, financial, legal, and regulatory support mechanisms for renewable energy deployment. In turn, these mechanisms can help by improving access to financing, developing the necessary infrastructure, and building awareness about renewable energy and the challenges posed by a lack of access to sustainable sources of energy (REN21, 2014).

Opportunity 2 – Deliver on Multilateral and Bilateral Commitments

Poverty reduction in a low-growth economic paradigm would mean decoupling growth from energy consumption through improved energy efficiency while reducing energy-related GHG emissions and eventually moving towards the deployment of low-GHG emission technologies. **At the Rio +20 conference in June 2012, countries formally adopted a ten-year framework plan.** The primary objectives of the framework is to **“support regional and national policies and initiatives to accelerate the shift towards sustainable consumption and production, by mainstreaming the targets into sustainable development policies, programmes and strategies and enable all stakeholders to share information and knowledge on tools and best practices”** (UNEP, 2014).

There is a global approach for scaling towards universal energy access. Numerous international and regional funds, programmes, initiatives and governments support this goal at national level in Sub-Saharan Africa. However, most attention is being paid to improve energy efficiency, rather than on serious alternatives for fossil-fuel consumption.

There are signs of progress: In Africa **upper middle income countries - South Africa, Angola and Botswana, lead the field in offering enabling conditions for sustainability with actions from national to municipal level.** These actions range from model cities, low-emissions development strategies including: changing building codes in line with national GHG

emissions reduction targets through the use of renewables in buildings, net metering for local small-scale renewable systems, and payment plans to encourage households to use solar energy for water heating in buildings. In 2013 Kenya, Mauritius and Burkina Faso also invested in wind and solar energy technologies and systems.

Opportunity 3 – New funding models: Private sector investment and peer to peer finance

Historically, energy access programmes were developed and implemented by national and local governments, international development agencies, and non-governmental organisations. In the last decade, the **provision of energy services to rural markets has evolved from a centralised, public sector-led approach to one more focussed on public-private partnerships and private ventures in which renewable energy plays a key role.** Commercial lenders, social venture capitalists, local and international development entities, governments, and others are actively engaged in the financing of distributed renewable energy (UNDESA 2014). Networking platforms are a potentially significant source of financing for decentralised off-grid markets, which require small-scale investments. Similarly such financing could be used to support access to small scale water infrastructure for smallholder farmers.

There are **promising new business and financing models being deployed: peer-to-peer finance, Pay-as-you-go (PAYG) phone micro-payment schemes.** There is a global fund for micro-finance. In franchise models, local entrepreneurs in rural areas are trained to run micro-enterprises. “Lighting a Billion Lives” campaign sets up solar businesses that rent charged solar lanterns by the day, in villages with poor access to electricity. Low-income rural customers are potential markets for energy goods and services. In response companies have become active in providing household renewable energy products and systems across Africa.

Challenge 3 – How can National Development Policy be Effectively Implemented?

“...When a substantial proportion of a country’s population is poor, it makes little sense to detach poverty from the dynamics of development.”(UNRISD, 2010). Most African states need to reduce poverty, improve health, and expand education programmes. To do so the governments of Sub-Saharan Africa will need to coordinate development policies for key sectors, and through strategies and investments, deliver essential services to people living in Africa. There are already policies and opportunities for improvements in access to water, energy and food supply across most countries of Sub-Saharan Africa. What needs closer examination is implementation and impacts on current institutional arrangements and concrete practice.

Opportunity 1 – Inclusive Governance at all levels and in all sectors

Sub-Saharan African countries need to manage policy reforms towards sustainable development goals. **According to the FAO State of Food Insecurity in the World, “the food-insecure need control over resources, access to opportunities, and improved governance at the international, national and local level” (FAO, 2009).** In countries with fragile governance systems, when social protection and economic development objectives compete, large sections of the population can be simply excluded from decision-making processes. Building long-term resilience to climate change requires a change from top-down and expert-driven governance approaches and vertical networks of power. In general, poor communities are still hindered by unequal access to livelihood resources and land tenure, inequitable participation in decision-making processes, and political disenfranchisement. Rural communities get energy, food and water directly from the natural areas they live in. **These**

communities are natural resource managers themselves and can be key to reduce and reverse environmental damage.

Smallholder farmers need secure water and land rights as well as better market infrastructure, access to new technologies, extension services and information, market access, and financial assistance with input prices. African governments committed to double the share of budget to agriculture in 2011. **Countries that are corrupt, countries in conflict struggle to provide policy leadership.** For private sector initiatives to flourish, small businesses need favourable national policy environment, with environmental rules and regulations at national level, and enforcement at local level. There are scattered indications of progress in sustainable consumption and production and in energy provision but much more needs to be done to encourage new investors and entrepreneurs.

Consultative decision-making processes are a necessary part of sustainable economies, providing context-appropriate information streams to direct state investment priorities. For example, a focus on local job creation can shape policies. Small and micro-enterprises tend to employ a larger share of people than larger entities and have significant contributions but in order to have a significant effect on national social and economic development a number of challenges will have to be overcome. At the moment these organisations lack visibility and would be helped by greater public awareness through environmental education to increase understanding of their products in the local market plus specific subsidies to the SMME sector as well as influential supporters, investors, training, and skilled workers. 70 percent of all small-, micro-, and medium-sized enterprises (SMMEs) worldwide lack access to credit; the rate is even higher in Africa. SMMEs also need research and technical support, to improve on management of complex multi-stakeholder partnerships, and progress monitoring.

Opportunity 2 – Social Entrepreneurs supporting development

The policy community, international development community and civil society actors have all welcomed **new multi-stakeholder partnerships that include the private sector and socially minded, entrepreneurial individuals in sustainable development.** A number of international award programmes; for example, the Equator Initiative, the Ashoka Foundation and the SEED initiative support community-based enterprises to implement new business models with promising results in the form of social, environmental and economic benefits. New business models are being implemented, with promising results in the form of social, environmental and economic benefits.

A recent study has looked at the SEED Initiative for community-based small-, micro-, and medium-sized enterprises (SMMEs). 75 percent of the 1300 social and environmental enterprises examined were based in Africa. Researchers found that **small-scale social and environmental enterprises create social and environmental change at the local level, developing using business and entrepreneurship operating models to deliver new products and services for their communities.** SEED SMMEs reported outcomes in poverty reduction, social resilience – organising and empowering communities for participation in governance, alternative livelihoods, and environmental protection - protection of ecosystems, emissions reduction, preserving biodiversity, and reducing land degradation.

Evaluation of SEED awardees has shown that **private entrepreneurs and individuals working at community level with traditional institutional actors are able to deliver public goods and services** like social resilience, economic, and environmental protection (Creech et al., 2015). What remains to be seen is how the benefits described can be supported at national

level, sustainably financed, and whether the outcomes demonstrated at pilot phase can be delivered at scale.

Challenge 4 – How does globalisation affect sustainability in Africa?

The **regional impacts of sustainability strategies are becoming more complex to manage, with implications for future sustainability.** The global North and the global South have differentiated paths towards sustainability following the principle of historical and common but differentiated responsibility, used in setting emissions targets at higher levels for already industrialized and industrializing countries. **Discussions of differential development tend to focus on capacity gaps (weak institutions, incompetent leadership) and moral failings (corruption) unquestioningly assumed to be typical of Sub-Saharan Africa. In reality the picture is much more complex.** The question of power is often elided; political, economic, and geopolitical negotiating power remains unevenly distributed between and within the Global South and Global North. Investment flows have a major impact on how African economies develop.

For low-income countries overseas development assistance (ODA) makes up a large proportion of GDP. As donor GDP has decreases in periods of global economic downturn, ODA has also dropped. For low-income countries in periods of global economic downturn exports, remittances, and foreign direct investment (FDI) drop too, at the same time and lead to unemployment and loss of income. Despite the United Nations (UN) Addis Ababa Action Agenda at the International Conference on Financing for Development (FfD3) and the global social compact which envisages high-income countries spending 0.7 percent of their gross national income on ODA, **it is not yet clear how the needed investments by low-income African countries in human capital through health, education, social protection, employment and in sustainable technologies and infrastructure, are to be funded (Brookings, 2015).** As well ODA is increasingly being regarded as a business investment, and expected to open markets to donor businesses (BMZ, 2010). “Every euro spent on development in our partner countries adds 1.8 euros to German export revenues.” (BMZ,2010). This leads to conflict in objectives set for ODA and distortions to strategy in receiving countries. While recent financial instruments such as peer financing or crowd funding are starting to play a role in providing energy access to neighbourhoods and households, these initiatives are not at scale and thus make little difference to how the majority of poor rural people live.

In a striking example of globalisation impacts there have been unexpected consequences of investment in first-generation biofuels on food security in Africa. From 2001 **food and fuel prices increased steadily and combined with speculation on financial markets led to food insecurity in low-income countries of African and Asia between 2006 and 2008.** FAO estimates that Sub-Saharan African countries increased spending on food imports by almost 30 percent in 2011 (FAO, 2012). The **poor bargaining position of the agricultural producers in low-income countries means that they are often not able to get better prices for their products even when prices on the international markets are high** (UNEP, 2009).

A rise in global demand, greater competition for fuel, fertilizers and other resources means higher prices, unless more production efficiencies take place, production is increased, and sustainable alternatives are found. Price rises affect households, industrial production and in turn the global market. Additionally, the last **global financial crisis reduced inflow of capital to Sub-Saharan Africa from FDI, ODA, exports and remittances.** In all the cases mentioned poor people were affected much more than the rest of the population. The food crisis and the crisis in the financial markets wiped out poverty reduction gains and nutrition gains of more than

a decade. Both situations were largely beyond the short-term control of the countries concerned. Instead the international markets, and choices of Northern consumers and investors determined what happened in Sub-Saharan Africa's food markets.

Opportunity 1 – Regulate the economic and financial market environment

SDG target 17.15 speaks of an – **“alternative development model rooted in the [African] continent's particular experience, one that represents a shift away from the unsustainable primary commodity export mode”**. The bulk of commodities that are extracted and exported from Sub-Saharan Africa are neither renewable nor replaceable, but commodity prices do not reflect this basic fact. It is therefore cynical to describe the removal of extractives as trade. Tax administration, transparency in the extractives industry and governance over extractives is weak on the side of African governments but also on the side of the countries who import commodities from Africa. **Africa loses twice as much from fraud (corrupt practices) by international companies - unethical tax avoidance, transfer pricing and anonymous company ownership as it receives in international aid (ADB/GFI, 2013).**

While current thinking calls for revising notions of social progress worldwide, changing individual consumption patterns in the high-income countries, raising income and consumption levels in low-income countries, discussions remain at the normative level. While the recent trends in some high-income economies are promising there is little hard evidence of a general trend towards de-development in high and middle-income countries or of a shift to socially inclusive economic models in low-income countries and income inequality is rising in both the North and the South (Perch 2012). Sustainability is not being seriously attempted.

Due to the impact of global economic forces on growth and income in poor countries attention should be paid to create a global economic and financial market environment that is compatible with growth and poverty reduction in all countries (UNRISD 2010). Otherwise there is the risk of a widening gap between rich and poor people and regions and periodic or continuous crisis.

Opportunity 2 – sustainable consumption and production

The goal of sustainable consumption and production in Sub-Saharan Africa is to provide basic goods and services, which are very much lacking and then to reduce material and energy intensity. Only 64 percent of the population of Sub-Saharan Africa have access to an improved water source (WHO/UNICEF JMP 2014). With a 2.4 percent growth rate, Sub-Saharan Africa's population is projected to increase from 770 million to nearly 1.7 billion by 2050 (UNEP 2009). As populations grow and eating habits change, the systems for supplying food, water and energy need to produce more, with greater efficiency.

There are scattered indications of progress in sustainable consumption and production and in energy provision. There are National Centres for Clean Energy Production to promote sustainable consumption and production within SME's in nine African countries already. These centres have produced encouraging results and the effort needs to be extended across other countries in order to meet targets for waste and emissions reduction, and material use intensity (UNEP 2014).

Challenge 5 – How can national data gathering monitoring capacities be improved?

There are capacity gaps in Sub-Saharan African countries that make difficult the task of tracking and assessing progress on sustainability. Agenda 21, adopted in 1992 at the Rio Earth Summit, called on countries to develop indicators of sustainable development that can provide a solid basis for decision-making at all levels. Many countries of Sub-Saharan Africa are yet to use Sustainable Development Indicators as a policy-oriented tool linked to national strategies, with political support and long-term budget provisions. Most are still to develop and implement ways of measuring Sustainable Development Indicators.

Climate data and impact evaluation evidence from Sub-Saharan Africa is somewhat limited, making measurement and monitoring difficult. There are differences in methodologies for basic indicators such as crop yields, prevalence of poverty and hunger. National statistical capacities need to be supported to provide a sound basis for decision-making. Data collected by national and regional statistical bodies, is not always used for international assessments. Data gaps are being addressed through Internet- and SMS-based based surveys, but not as yet being taken up from the research institutes into national policy-making circles (UNDESA 2014).

Conclusion

Worldwide, consumer demand has followed economic growth and continues to do so. At present, dematerialization and reduction in energy intensity of economic activity have together not been enough to compensate a massive rise in absolute volumes. Gains in efficiency are being cancelled out by increases in consumption. A low consumption economy is still to emerge.

The states of Sub-Saharan Africa aspire to the classic industrialisation pathway to development. At the same time **most countries lack the volume of investment (FDI, ODA, remittances, trade, credit) in education, health, transport infrastructures that would underpin the structural transformation of their economies necessary for sustained high growth or for the deployment of clean technologies.**

It is now clear that at the global level while economic growth has shared environmental costs, shared benefits are harder to identify. Direct economic benefits from early industrialisation described as “grow now, clean up later” enabled high-income states to invest massively in building up public infrastructure, services and skills. Countries that are industrialising now, face potential economic costs from emissions reductions; additionally these countries are earning lower levels of per capita income and creating less jobs in manufacturing than early industrialisers (UNDESA 2014). The goods exported from Sub-Saharan Africa also face stringent criteria from quality, health and eco-aware consumers in the markets of the Global North.

Independently financed mitigation and adaptation options would reduce vulnerability to adverse climate impacts but are limited within a global economic model where Sub-Saharan African countries in particular, are locked into legacy structures, dependent on raw material-based commodities export according to terms of trade that the German Development Minister has recently described as unfair and exploitative (Tageschau, 11.09. 2015). For sustainable, inclusive growth African countries need better governance, and radical changes to the international economic and financial markets they operate within.

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