



One planet
consume and produce with care



The One Planet Network is the network of the 10 Year Framework of Programmes on Sustainable Consumption and Production

Shaping the economy of sustainable development

An overview of policies and initiatives supporting the shift towards sustainable consumption and production patterns in Africa



ADVANCE COPY

Copyright © United Nations Environment Programme, 2018.

This technical report may be reproduced in whole or in part and in any form for educational or non-profit purposes without special permission from the copyright holder, provided acknowledgement of the source is made. UN Environment would appreciate receiving a copy of any publication that uses this technical report as a source.

No use of this technical report may be made for resale or for any other commercial purpose whatsoever without prior permission in writing from the United Nations Environment Programme.

Disclaimer

The designations employed and the presentation of the material in this report do not imply the expression of any opinion whatsoever on the part of the United Nations Environment Programme concerning the legal status of any country, territory, city or area boundaries. Moreover, the views expressed do not necessarily represent the decision or the stated policy of the United Nations Environment Programme, nor does citing of trade names or commercial process constitute endorsement.

UN Environment promotes environmentally sound practices globally and in its own activities. Our distribution policy aims to reduce UN Environment carbon footprint.

Contact details

Fabienne Pierre
Mainstreaming SCP policies
10YFP Secretariat UN Environment
Economy Division
1 Rue Miollis, Building VII,
Paris France 75015

email: fabienne.pierre@un.org
telephone: +33 1 4437 1426

ACKNOWLEDGMENTS

Authors: Fabienne Pierre, UN Environment

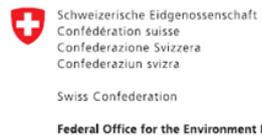
Survey design, methodology and data processing: Lewis Akenji and Ryu Koide IGES, Fabienne Pierre, UN Environment

Editorial supervision and coordination: Fabienne Pierre, Programme Officer, UN Environment, under the supervision of Charles Arden-Clarke, Head of the 10YFP Secretariat, with the support of Listya Kusumawati, Consultant, UN Environment

Review and inputs: Patrick Mwesinge, UN Environment, Sheila Karue, Consultant, UN Environment, Dr. Julius K. Ningu, Director of Environment, Division of Environment Vice President's Office United Republic of Tanzania, Dr. Serges-Alain, Director of Green Economy and Social Responsibility, Ministry of Sanitation, Environment, and Sustainable Development of Ivory Coast, Sin Lan Ng Yun Wing, Director of Environment, Ministry of Environment Sustainable Development, Disaster, and Beach Management Mauritius, Dhanny Mwango, Consultant, UN Environment

The report also benefited from the generous funding support the European Commission, Norway and Switzerland, and United Nations Development Account.

DRAFT



FIGURES, TABLES, AND MAPS

Figure 1. Participating African countries	p.23
Figure 2. Structural and sectoral policies frequently addressing sustainable consumption and production according to 9 African countries	p.33
Figure 3. Distribution of Reported Policies	p.43
Figure 4. Types of Policy Instruments Reported	p.44
Figure 5. Funding sources mentioned in the pilot survey on national sustainable consumption and production policies and initiatives, 2015	p.55
MAP 1 and 2 African countries with policies addressing sustainable consumption and production	p. 10, 30
Table 1. Key Indicators for Africa	p.18
Table 2. Countries considered in the report and key indicators	p.24
Table 3. Domestic Extraction, Domestic Material Consumption, Material Footprint, Material Intensity, Ecological footprint	p.26
Table 4. Priority sectors identified in national policy frameworks addressing SCP in 15 African countries	p.32

Abbreviations and acronyms

10YFP	10-year framework of programmes on sustainable consumption and production patterns
ACF	Agricultural Consultative Forum
AFD	<i>Agence Française de Développement</i>
AfDB	African Development Bank
AgSAG	Agriculture Sector Advisory Group
AMCEN	AMCEN African Ministerial Conference on the Environment
ANASUR	National Agency for Food Safety Urban / <i>Agence Nationale De La Salubrite Urbaine</i>
ANDE	National Environment Agency
ARSCP	ARSCP African Roundtable on Sustainable Consumption and Production
AU African Union	AU African Union
BADEA	Arab Bank for Economic Development
BCEs	Biogas Constructions Enterprises
CAADP	Comprehensive Africa Agriculture Development Programme
CAMARATEC	Centre for Agricultural Mechanization and Rural Technology
CIAPOL	Center Ivorian Anti-Pollution
CSOs	Civil Society Organizations
ECA	ECA Economic Commission for Africa
EEMO	Energy Efficiency Management Office
FAO	Food and Agriculture Organisation
FFPSU	Fund for the financing of urban safety Programs <i>Fonds de Financement des Programmes de Salubrite Urbaine</i>
GDP	Gross Domestic Product
GEF	Global Environment Fund
GHG	Greenhouse Gas
UNDA	United Nations Development Account
UN Environment	United Nations Environment Programme
UNFCCC	United Nations Framework Convention on Climate Change
UNDP	United Nations Development Programme
MFL	Ministry of Fisheries and Livestock
<i>MID</i>	<i>Maurice Ile Durable</i>
MINESUDD	Minister of the Environment, Urban Salubrity, and Sustainable Development / <i>Ministère de La Salubrité de l'Environnement et du Développement Durable</i>
MoA	Ministry of Agriculture
NAIS	National Agriculture Information Services
NAIP	National Agricultural Investment Plan
NCC	National Coordination Committee
NEPAD	New Partnership for Africa's development
NIA	National Implementing Agency
OIPR	and Ivorian Parks and Reserves / <i>Office Ivoirien des Parcs et Réserves</i>
SCP	Sustainable Consumption and Production
SIDS	Small Island Developing States
SNAP	Second National Agricultural Policy

RECs	Regional Economic Commissions
VETA	Vocational and Educational Training Authority
SADC	Southern Africa Development Community
SIDO	Small Industries Development Organisation
SCCLUT	Savings and Credit Cooperatives Union League Tanzania
SOA	Sustainable Organic Agriculture
ZNFU	Southern Africa Development Community

DRAFT

Table of contents

Acknowledgements.....	3
Figures, maps, and tables.....	4
Abbreviations and acronyms.....	5
Executive summary.....	8
Essentials of Africa’s socio-economic and environmental profile.....	13
Laying the foundations for a policy baseline in Asia.....	22
Enabling conditions for change: the policy landscape for sustainable consumption and production in Africa.....	28
- Success Story – Mauritius: Pioneering the mainstreaming of sustainable consumption and production objectives	37
Seizing on-going efforts: taking stock of existing policy instruments.....	42
- Case study – Zambia: Promoting Sustainable Agriculture	44
- Case study – Ivory Coast: Creating enabling conditions for sustainable consumption and production through environmental fiscal policies	49
Institutional arrangements and stakeholder participation.....	51
Funding and technical resources.....	54
Monitoring and indicators for sustainable consumption and production	55
- Case study – Tanzania: Sustainable production of domestic biogas – creating employment opportunities and preserving the environment	56
The Way Forward.....	58
Index.....	61
References.....	63

Executive summary

Africa is the world's second largest continent covering an area of approximately 30.3 million square kilometers, with 54 countries and is characterized by a great socio-economic, environmental and cultural diversity hosting a total of 1,186 million people. According to the Africa review report on sustainable consumption and production issued by the United Nations Economic Commission for Africa in 2009, the region faces particular challenges when it comes to operating the shift. Addressing the environment, economic and social pillars of sustainability simultaneously is a true imperative for African countries' development: *"For many poor people in Africa, the quality of their environment and the natural resource base is a matter of survival"*¹.

Africa is the world's second fastest growing economy following East Asia and is expected to remain so until at least 2020. However, the region's contribution to the global GDP also remains marginal: for instance, **Sub-Saharan Africa generates only slightly more than 2% of the global GDP** and contributes only modestly to world trade. In the mean time, Africa's GDP per capita in 2015 remained more than five times less (1,898) than the global average (10,005). **The limited diversification of African economies is among the main reasons given for this phenomenon.**

According to the UN Economic Commission for Africa, the **low value attributed to natural resources on international trade markets is also at issue**, as it means that those countries with comparative advantage in natural resources are put at a paradoxical economic disadvantage, the costs of natural resources being largely under-estimated and still considered as "externalities."

In the meantime, Africa is one of the continents that are the most vulnerable to environmental degradation, although it has the smallest ecological and carbon footprints per capita in the world (1,4 ton/ha per capita, versus respectively 2,8 ha per capita and 4,9 ton-capita in average globally). According to International Resource Panel, the region's Material Footprint per capita is 2,86 tonnes in average, 3,5 times less than the world average (10,1 tonnes per capita). Several

At the UN Conference on Sustainable Development (Rio+20) in 2012, Heads of State adopted the 10-Year Framework of Programmes on Sustainable Consumption and Production Patterns, a **global framework for action to accelerate the shift towards sustainable consumption and production in both developed and developing countries.** The central role of this framework in achieving sustainable development is affirmed under Agenda 2030 as a standalone target (12.1) calling for its implementation.

The Framework aims at creating a global movement and generating collective impact through multiple channels, including six multi-stakeholder programmes (food systems, public procurement, consumer information, lifestyles and education, tourism, buildings and construction), which serve as "accelerators" to develop, replicate and scale up policies and initiatives at all levels. It also fosters knowledge and experience sharing, and facilitates access to technical and financial resources for developing countries. UN Environment serves as the Secretariat.

¹ Report of the Sixth Session of the Committee on Food Security and Sustainable Development (CFSSD-6)/ Regional Implementation Meeting (RIM) for CSD-18 Africa Review Report on Sustainable Consumption and Production, Addis Ababa, 27 – 30 October 2009 (ECA/FSSD/CFSSD/6/16)

factors put Africa at risk of increasing their deficit rapidly and endangering the already fragile foundation of their development, especially if sustainable consumption and production patterns are not further advanced.

Africa is also the world's second most inequitable region after Latin America. Transferring wealth into improved well-being and reducing inequalities remains the biggest challenge for the region, to which sustainable consumption and production must also respond.

This report presents an overview of policies and initiatives related to sustainable consumption and production advanced by the governments of the African region. Although not pretending to present an exhaustive overview, the report was developed based on a broad literature review, including key reports produced by the UN Economic Commission for Africa. Furthermore, it builds on the results of a pilot survey conducted end of 2015 by UN Environment serving as Secretariat of the 10-Year Framework of Programmes on Sustainable Consumption and Production, to which nine African countries participated. The report provides key elements of the African region's socio-economic and environmental profile, which sets the scene, an introduction to regional frameworks and networks promoting sustainable consumption and production patterns across Africa, as well as an initial review of relevant national policy frameworks and instruments, with two objectives: **1) understanding on-going efforts to create the conditions for an economy of sustainable development, and 2) laying the foundations for a baseline that can serve as a starting point to track progress on sustainable consumption and production policies in the region, in the context of Agenda 2030 for Sustainable Development and the Sustainable Development Goals.**

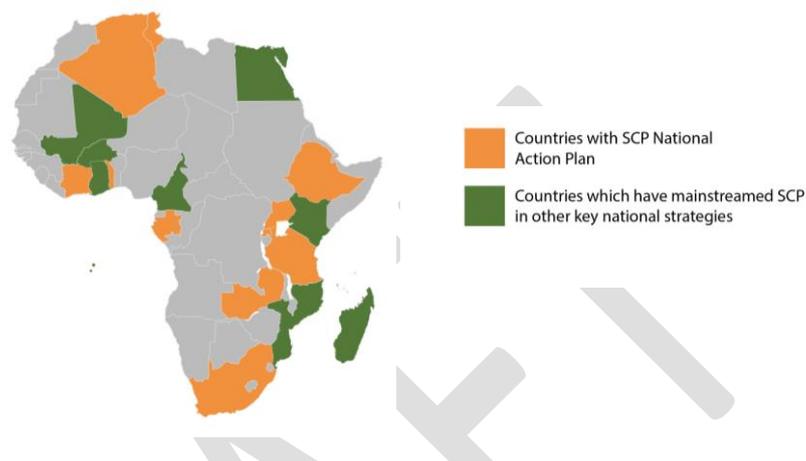
This report also presents several case studies from Zambia, Ivory Coast, Tanzania, as well as a country success story from Mauritius, as inspiring examples of government-led initiatives.

Africa's approach to Sustainable Consumption and Production

Sustainable consumption and production has been anchored in Africa's regional cooperation frameworks and networks for many years, including through the African Ministerial Conference on the Environment (AMCEN) established in 1985 and its Partnership for Sustainable Consumption and Production in Africa, established to lead the implementation of the 10 Year Framework of Programmes in the region. In the meantime, continuous efforts to replicate and scale up successful activities and initiatives in partnership with regional institutions, such as the African Roundtable on Sustainable Consumption and Production (ARSCP) and the African Union (AU), can also be observed. Major cooperation and development platforms funded by the European Commission have been established to support the mainstreaming of the green economy, and sustainable consumption and production approaches in Africa, especially through the SWITCH Africa Green and SWITCH Med projects.

Many African countries envisage the shift to sustainable consumption and production as a growing opportunity to provide sustainable solutions to their most essential needs and strategic priorities. Over the last 10 years, a lot of progress was also made at national level in designing policy instruments aimed at supporting this shift with the objective of creating the conditions for a smarter economic growth and development. According to this report, **sustainable consumption and production as an objective has been addressed at a national and cross-sectoral level in at least 21 of the 54 African countries, nearly 40% of them.** Among those 21 countries, 57% have or are developing a specific national action plan, 47% have integrated

sustainable consumption and production as a key development priority within their national sustainable development strategy and 38% in their national green economy strategy. The priorities identified under those national policy framework respond to some of the greatest challenges Africa’s development is facing, including **rapid urbanization (cities, buildings and construction, transports), the need to ensure fair and safe access to food, energy and water, to support agriculture as one of the most important economic sectors of the region but also industrialization and innovative sectors such as tourism, as well as to support young people.**



MAP 1: African countries with policies addressing sustainable consumption and production

Those priorities are also well reflected in the sectoral policies that were reported by 9 African countries on the occasion of the 2015 pilot survey, mainly on food and agriculture (38%), energy and climate (29%), biodiversity, water and forests (19%), tourism and waste in a more marginal way (respectively 10% and 5%).

The survey results showed that programmatic and planning instruments tended to be more often mobilized, together with capacity-building, awareness-raising and education, to achieve policy objectives. On the other hand, only a few policies reported through the pilot survey consist in developing the physical infrastructures and equipments conducive to the adoption of sustainable consumption and production patterns. Regulatory instruments and legal reforms are also less represented, followed by economic and financial instruments, as well as voluntary agreements.

The way forward: building resource-efficient and competitive economies in Africa

There are already some positive indicators reflecting the huge potential of Africa for economic development and innovation through a rapid shift towards sustainable but also competitive consumption and production systems. This includes the region’s efforts to facilitate business development: in 2014-15, sub-Saharan Africa accounted for about 30% of the regulatory reforms intended to facilitate business development, followed by Europe and Central Asia. The evolution of direct foreign investment in the region also seems to confirm the growing role of

manufacturing and consumer goods in the economy. According to the African Development Bank, countries such as Kenya, Tanzania, and Uganda, which are not considered as “resource-rich,” received an estimated 37% of Africa’s foreign direct investment in 2015, compared to 30% in 2010. Those indicators can be interpreted as a **signs of a “potential industrial take-off” – making sure these investments and this development are sustainable is essential to the future of Africa.**

Africa has the smallest ecological and material footprints among all regions. However, according to the World Economic Forum, based on the data provided by the Global Footprint Network for 2013, 30 African countries are in environmental deficit. In fact, the environmental impact intensity of industrialization in the region is among the highest of the world, despite the modest contribution of manufacturing to national economies. **Several factors put the region at risk of increasing this deficit rapidly and endangering the already fragile foundation of its development, especially if sustainable consumption and production patterns are not further advanced.** In Africa, sustainable consumption and production is often understood as a transversal and inclusive approach, which can encompass many of the instruments mobilized to transform economic development and societal models into sustainable ones. **Promoting sustainable consumption and production is recognized as a source of opportunities: economic diversification, through industrial development and sustainable products, or through emerging sectors such as tourism, entrepreneurship, green and decent jobs, food and energy security, innovation and technology transfer, inclusive governance for a better share of benefits across society.** The transition will strengthen the efforts of the region towards the achievement of the Sustainable Development Goals and the implementation of the 10-Year Framework of Programme on Sustainable Consumption and Production.

To accelerate this transition, the following recommendations should be considered:

1. Initiate or continue the development of the institutional capacities and human resources needed to mainstream sustainable consumption and production objectives

Any integrated approach to sustainable consumption and production at country level requires public actors, including ministries, legislative bodies and national administrations, to agree on the objectives they can deliver collectively, while building on the specificity and strengths of individual mandates. This requires political leadership, institutional capacities and resources that can help organize collective action, across sectors, including with regards to budgeting processes. The development of national strategies and/or action plans, through inclusive and consultative processes, can also serve as an initial step.

2. Encourage investments and business innovations for sustainable consumption and production models

Investing in sustainable consumption and production can become a competitive advantage on the international economic scene, as well as a driver for innovation in key development sectors, such as housing, energy or agriculture. Domestic and foreign investments should be encouraged, and the shift to sustainable consumption and production models also considered as a strategic objective while countries continue to work on regulatory and economic reforms that can facilitate business development. Public-private partnerships are still to be developed at scale to support the sustainable development of basic infrastructures and innovation.

3. Realize the economic and the social potential of sustainable consumption and production

Promoting sustainable consumption and production is recognized as a source of opportunities: economic diversification through industrial development and emerging sectors, innovation and technology transfer, green and decent jobs, inclusive governance for a better share of benefits across society. However, social benefits of sustainable consumption and production, such as the reduction of inequalities or the promotion of equity, are still largely overlooked. Such social benefits should be analyzed and further pursued, as they are central to any development model that has people's well-being as its purpose.

4. Strengthen stakeholders' engagement and cooperation, at national and regional level

The objective is to further develop inclusive cooperation platforms, at both national and regional levels, that can support each country in its efforts to accelerate the shift towards sustainable consumption and production. Such platforms play an essential role in facilitating access to technical support. They also provide countries with opportunities to share experience and lessons learned, identify successful solutions and good practices. The adoption of Agenda 2030 offers a great opportunity for Africa to revise its regional roadmap for sustainable consumption and production, and the modalities of its implementation.

5. Encourage more African countries to monitor and report on progress

The participation of more African countries in reporting exercises focused on national sustainable consumption and production policies and their impacts should be actively encouraged. This is key to better understand the status of those policies and the best strategic options available to countries, considering environmental and socio-economic objectives. Future efforts should also focus on collecting more information on the costs and benefits of the policies and instruments that are being experimented, especially legal and economic instruments likely to change the rules of the games.

Essentials of Africa's socio-economic and environmental profile

Africa is the world's second largest continent covering an area of approximately 30.3 million square kilometres, with 54 countries and is characterized with a great socio-economic, environmental and cultural diversity. The region is traditionally divided in two distinct groups – Northern Africa and sub-Saharan Africa, which includes another four sub-regions (Western Africa, Central Africa, Eastern Africa and Southern Africa). With more than 20 per cent of the global land area, Africa is also the second most populated continent on Earth: the region hosts about 16% of the world's population - a total of 1,186 million people - and is expected to represent more than 25% by 2050². Demography is naturally very diverse from one country to another: population ranges from 96,000 in Seychelles to 182.2million in Nigeria³. The Africa population is also the youngest in the world with a median age of 19.5 years, and 3/5 of the population aged under 24 (including 41% under 15)⁴.

As already highlighted in the Africa Review Report on Sustainable Consumption and Production issued by the Economic Commission for Africa (ECA) in 2009⁵, the African region faces specific challenges when it comes to operating the shift towards more sustainable consumption and production patterns. **Addressing the environment, economic and social pillars of sustainability simultaneously is a true imperative for African countries' development and capacity to satisfy the basic needs and aspirations of their people as well as of future generations: "For many poor people in Africa, the quality of their environment and of the natural resource base is a matter of survival."**⁶ In that context, sustainable consumption and production offers many new opportunities, which can provide a valuable contribution to poverty alleviation and natural resources management. This includes the development of **new markets and creation of decent jobs, notably in key sectors such as sustainable housing, renewable energy, fair trade or sustainable agriculture.**

The shift towards sustainable consumption and production systems is also perceived as a **unique opportunity to "leapfrog" to a new model of growth and development which can avoid the consumption-driven impacts observed in developed but also emerging economies worldwide.** This is the position of African countries at the highest level, as expressed for example in the African Consensus Statement for the Rio+20 Conference on Sustainable Development, which called for the implementation of the 10-Year Framework of Programmes on Sustainable Consumption and Production as well as for the development of dedicated policies at national level: *"Africa, being at the early stages of industrialization, has an opportunity to pursue sustainable industrial growth that limits the environmental, social and economic costs of industrialization, and increases the efficient use of energy and material input, thereby enhancing international competitiveness. Therefore, there is a need to remove all obstacles to the full*

² United Nations Department of Economic and Social Affairs, Population Division, "World Population Prospects: The 2015 Revision, Key Findings and Advance Tables", https://esa.un.org/unpd/wpp/Publications/Files/World_Population_2015_Wallchart.pdf

³ op.cit

⁴ Worldometers, "Africa Population", <http://www.worldometers.info/world-population/africa-population/>

⁵ *Report of the Sixth Session of the Committee on Food Security and Sustainable Development (CFSSD-6)/ Regional Implementation Meeting (RIM) for CSD-18 Africa Review Report on Sustainable Consumption and Production*, Addis Ababa, 27 – 30 October 2009 (ECA/FSSD/CFSSD/6/16)

⁶ op.cit

*implementation of this process. The African Ten Year Framework of the Programme on Sustainable Consumption and Production and the subsequent activities on developing national local sustainable consumption and production action plans should be used and supported to contribute to the promotion of sustainable industrial development and the green economy*⁷.

Africa is the world's second fastest growing economy after East Asia, and is expected to remain so until at least 2020⁸. According to the African Development Bank, growth in real GDP has been higher in Africa, with a 3,3% rate in 2015, than the one of the global economy and especially of the Euro area (1.5%)⁹. In addition, sub-Saharan Africa (excluding South Africa) grew faster, at 4.2%, than the continental average, and in particular in East Africa, which reached a 6.3% growth rate. Africa is therefore one of the most economically dynamic regions in the world. The region has however faced a deceleration between 2010 and 2015, according to the World Economic Forum (WEF)¹⁰. It estimated that the number of countries with a stable or quickening growth halved in 2016 and that Africa's six largest economies experienced slowing growth. In this context, and based on various indicators (macro-economic factors, economic diversification and socio-political stability), the McKinsey Global Institute identifies three distinct groups of countries: 1) "stable growers", with high rates of growth and stability (e.g. Ethiopia, Tanzania, Rwanda, Côte d'Ivoire, Kenya, and others); 2) "Vulnerable growers", which accounted for 35% of Africa's GDP in 2015 (e.g. Democratic Republic of Congo, Ghana, Mozambique, Nigeria, Zambia and others) and 3) "Slow growers", which represented 46% of GDP (e.g. South Africa, Madagascar and three major North African countries – Egypt, Libya and Tunisia)¹¹.

Despite being one of the most economically dynamic region of the world, Africa's contribution to the global GDP also remains marginal: for instance, Sub-Saharan Africa generates only slightly more than 2% of the global GDP and contributes only modestly to world trade. In the mean time, Africa's GDP per capita in 2015 remained more than 5 times less (1,898) than the global average (10,005)¹².

⁷ *Africa Consensus Statement to Rio+20*, Africa Regional Preparatory Conference for the United Nations Conference on Sustainable Development (Rio+20) Addis Ababa, Ethiopia, 20-25 October 2011 (E/ECA/CFSSD/7/Min./3 – Para. 26)

⁸ *World Economic Outlook: Too Slow for Too Long*, International Monetary Fund, 2016

⁹ *Income inequality in Africa*, Briefing Note n°5, Briefing Notes for AfDB's Long Term Strategy, African Development Bank, March 2012

¹⁰ "Three reasons things are looking up for African economies", World Economic Forum on Africa.

<https://www.weforum.org/agenda/2016/05/what-s-the-future-of-economic-growth-in-africa> (accessed June 2017)

¹¹ *Lions on the Move II: Realizing the Potential of Africa's Economies*, McKinsey Global Institute, September 2016

¹² The World Bank – DataBank (2016). Retrieved from <http://databank.worldbank.org/data/>

In 2012, oil and gas, minerals and agriculture raw materials still represented about 75% of African exports*.

Agriculture alone provides more than 50% of all employment in the whole of Africa (UNDESA 2008b) , although not being a sector generating wealth at scale: in 2014, agriculture represented only 11.5% of GDP in the region, according to the World Bank**.

The **limited diversification of African economies is among the main reasons given for this phenomenon, African economies being largely dependent on low value commodities and price volatility.**

While structural change through the diversification of economies and the development of growth-enhancing sectors were expected, the Economic Commission for Africa observes that labor moved in the reverse direction *“from more to less productive activities, often to informal activities, with negative effects on productivity and economic growth¹³.”*

Beyond the diversification of economies, and as also noted by the Economic Commission for Africa¹⁴, the **low value attributed to natural resources on international trade markets** is also at issue, as it means that those **countries with comparative advantage in natural resources are put at paradoxical economic disadvantage, the costs of natural resources being largely under-estimated and still considered as “externalities”**. The shift towards sustainable consumption and production systems can help the region overcome those two major obstacles to Africa’s sustainable development.

There are already a number of positive indicators reflecting the huge potential of Africa for economic development and innovation, hence the huge potential for shifting quickly towards sustainable but also competitive consumption and production systems. The evolution of direct foreign investment in the region seems to confirm the growing role of manufacturing and consumer goods in the economy: for instance, according to the African Development Bank, countries such as Kenya, Tanzania and Uganda, which are not considered as “resource-rich”, received an estimated 37% of Africa’s foreign direct investment in 2015, compared to 30% in 2010. **The region is also developing a lot of efforts to facilitate business development: in 2014-2015, sub-Saharan Africa accounted for about 30% of the regulatory reforms aimed at facilitating business development, followed by Europe and Central Asia¹⁵.** Those indicators can be interpreted as indicators of a “potential industrial take-off” – making sure these investments and this development are sustainable is essential to the future of Africa.

¹³ *Macroeconomic Policy And Structural transformation of African Economies*, United Nations Economic Commission for Africa, 2016

¹⁴ op.cit

¹⁵ The World Bank, *Doing Business*: <http://www.doingbusiness.org/> (accessed June 2018)

* *Economic Development in Africa Report 2013 – Intra-African Trade: Unlocking Private Sector Dynamism*, UNCTAD, 2013

** The World Bank, *Africa Development Indicators*, <https://openknowledge.worldbank.org/bitstream/handle/10986/13504/9780821396162.pdf?sequence=1> (accessed June 2018)

In 2013, half of the extreme poor lived in sub-Saharan Africa, with 389 million people living on less than US\$1.90 a day, more than all the other regions combined and more than 32% of the entire African population*.

Transferring wealth into improved well-being and reducing inequalities remains the biggest challenge for Africa, to which sustainable consumption and production must also respond. Unfortunately, Africa's economic growth has not translated into better conditions of living and opportunities for its people, especially in sub-Saharan Africa: *“Accelerated per capita growth has failed to create enough job opportunities for the young, who comprise the majority of the poor, of whom young women and rural youth are the poorest.”*¹⁶

Africa remains the continent with the lowest Human Development Index in 2016. According to the African Development Bank, the rate of human progress for all African countries has even declined in recent years from the high growth rates achieved between 2000 and 2010. Many indicators reflect the alarming situation many people are facing in the region: **out of the 663 million people worldwide still using unimproved drinking water sources, 319 million live in sub-Saharan Africa (more than 25% of the African population), mostly in rural areas**¹⁷. **695 million people in Africa do not have access to improved sanitation facility, more than 50% of the population. Less than one in three people in Sub-Saharan Africa have access to a proper toilet in 2016**¹⁸.

In addition, tremendous inequalities are being observed within and between African countries: despite being the world's second fastest growing economy, **Africa is also the world's second most inequitable region after Latin America.** According to the Economic Commission for Africa, in 2009, Africa had the worst income distribution in the world (GINI coefficient of 51 per cent)¹⁹. In 2010, six out of the 10 most unequal countries worldwide were located in Central, East, Southern and West Africa²⁰. According to the World Economic Forum, Nigerian consumers alone may account for up to 30% of Africa's consumption growth over the next decade.

These dramatic poverty and inequality levels have unacceptable consequences on people's health and environment, which can only keep on degrading until access to basic services is provided: for instance, *“lack of access to modern energy results in air pollution, acute health problems and environmental problems linked to over-consumption or inadequate management of wood resources. There are serious negative impacts associated with this traditional biomass energy use, which range from indoor air pollution (Muchri and Gitonga, 2000) to deforestation”*²¹.

¹⁶ *Income inequality in Africa*, Briefing Note n°5, Briefing Notes for AfDB's Long Term Strategy, African Development Bank, March 2012

¹⁷ *Joint Monitoring Programme for Water Supply and Sanitation 2015 Report*, World Health Organisation/ United Nations Children's Fund, 2015

¹⁸ *The Water Project, Facts about water: statistics of the water crisis*, https://thewaterproject.org/water-scarcity/water_stats (accessed 2016)

¹⁹ *Report of the Sixth Session of the Committee on Food Security and Sustainable Development (CFSSD-6)/ Regional Implementation Meeting (RIM) for CSD-18 Africa Review Report on Sustainable Consumption and Production*, Addis Ababa, 27 – 30 October 2009 (ECA/FSSD/CFSSD/6/16)

²⁰ *Income inequality in Africa*, Briefing Note n°5, Briefing Notes for AfDB's Long Term Strategy, African Development Bank, March 2012

²¹ *Report of the Sixth Session of the Committee on Food Security and Sustainable Development (CFSSD-6)/ Regional Implementation Meeting (RIM) for CSD-18 Africa Review Report on Sustainable Consumption and Production*, Addis Ababa, 27 – 30 October 2009 (ECA/FSSD/CFSSD/6/16)

* The World Bank, Poverty overview, <http://www.worldbank.org/en/topic/poverty/overview>

Africa is one of the continents that are the most vulnerable to environmental degradation, although it has the smallest ecological and carbon footprints per capita in the world (1,4 ton/ha per capita, versus respectively 2,8 ha per capita and 4,9 ton-capita in average globally)²². The 2016 report of the International Resource Panel also shows that Africa has the lowest per-capita material footprint in the world, based on 2010 data (below 3 tonnes per capita, versus above 25 for North America)²³. Africa is the least extractive regions of the world, representing only 9% of total domestic extractions worldwide, extracting six times less than Asia Pacific²⁴. According to the material footprint of Africa in 2010, it appears that the region extracts 2,25 times more resources than it consumes (6,310,719,130 tonnes extracted in 2010, versus 2,802,092,184 tonnes of resources allocated to fulfill the final demand of African economies)²⁵. Material footprint per capita reveals even greater disparities between Africa and the rest of the world, with an average of 2,86 tonnes per capita in 2010, 3,5 times less than the world average (10,1 tonnes per capita) and 9,5 times less than the average material footprint of North America (27,14 tonnes per capita)²⁶.

Although Africa has the smallest ecological and material footprints among all regions, big disparities can be observed: according to the World Economic Forum, based on the data provided by the Global Footprint Network for 2013, **of the 52 countries in Africa with available data, 30 countries are in environmental deficit. Africa as a whole is already in environmental deficit (-0.17)**, even though this deficit is 21 times smaller than the one of North America (-3.59) and nearly 7 times smaller than the one of the world in average (-1.16)²⁷.

Several factors put Africa at risk of increasing their deficit rapidly and endangering the already fragile foundation of their development, especially if sustainable consumption and production patterns are not further advanced. If the essential challenge facing humankind is to raise living standards and human development within ecosystems carrying capacities, this is particularly true for African countries, especially low income ones, which will require increasing quantities of materials per capita to achieve sustainable development. Population growth and progress in human development are correlated with increased ecological footprint, as is also shown in the 2016 report of the International Resource Panel²⁸, hence the importance of promoting sustainable consumption and production systems as a means to enable social and economic

Environmental impact intensity of industrialization in the region is among the highest of the world, according to the Economic Commission for Africa, despite the modest contribution of manufacturing to national economies*.

²² *Material Footprint, Material Intensity, Material Productivity*, Schandl et al, 2015; *Ecological Footprint, Biocapacity: Global Footprint Network*, 2016; Norwegian University of Science and Technology and Center for International Climate and Environment Research, *Carbon Footprint of Nations – Data Visualizations Carbon (1990-2010)*, 2013

²³ *Global Material Flows and Resource Productivity Assessment Report*, International Resource Panel, United Nations Environment Programme, 2016

²⁴ UNEP Live data, domestic extraction (total – tonnes) and material footprint (total – tonnes) in 2010

²⁵ Op.cit

²⁶ Op.cit

²⁷ *Which countries are in ecological debt?* World Economic Forum, 2015

<https://www.weforum.org/agenda/2015/08/which-countries-are-in-ecological-debt> (accessed in June 2018)

²⁸ *Global Material Flows and Resource Productivity. An Assessment Study of the United Nations Environment Programme International Resource Panel*, United Nations Environment Programme, 2016

* *Report of the Sixth Session of the Committee on Food Security and Sustainable Development (CFSSD-6)/ Regional Implementation Meeting (RIM) for CSD-18 Africa Review Report on Sustainable Consumption and Production*, Addis Ababa, 27 – 30 October 2009 (ECA/FSSD/CFSSD/6/16)

development, while preserving the natural resources it depends on. Given the potential industrial take-off in Africa, as mentioned above, this has become an urgent move to make.

In the meantime, **material intensity**²⁹ high values in Africa (3.2 kg per dollar of GDP in USD) – the highest compared to other regions of the world, after Asia Pacific and Latin America for instance - shows that African economies, and in particular their production systems, are not yet environmentally efficient. In fact, **material intensity in Africa is 2,3 times higher than global average** (1.3 kg per dollar of GDP in USD). Similarly, despite a significant increase in the recent years, material productivity in Africa remains the lowest: 0.31 USD/kg compared to 0.75 USD/kg globally.

Table 1. Key Indicators for Africa

Population (million capita) (2015)	1,184	GDP per capita (USD) (2015)	1,898	Human Development Index (2014)	0.52
Domestic Material Consumption (million tonnes) (2010)	4,632	Ecological Footprint per capita (global ha/capita) (2012)	1.4	Carbon Footprint per capita (ton-CO ₂ /capita) (2010)	1.4
Material Footprint per capita (ton/capita) (2010)	2.86	Biocapacity per capita (gha per person) (2012)	1.3	CO ₂ emission per capita (ton-CO ₂ /capita) (2010)	1.1
Material intensity (kg/USD) (2010) * ⁴	3.2	Total Primary Energy Supply per capita (kJ/capita) (2010)	31	Labour Productivity (thousand USD/labour) (2016) * ³	15
Material Productivity (USD/kg) (2010) * ¹	0.31	Energy Productivity (USK/kJ) (2010) * ²	71	Inclusive Wealth Index per capita (USD) (2010)	19,192

*1 GDP divided by Domestic Material Consumption *2 GDP divided by Total Primary Energy Supply, *3 GDP divided by total number of employment *4 Domestic Material Consumption divided by GDP. Source: Population, GDP, CO₂ emission: The World Bank Group (2016), Inclusive Wealth Index: United Nations Environment Programme (2016), HDI: United Nations Development Programme (2016), DMC, Material Footprint, Material Intensity, Material Productivity: Schandl et al. (2015), TPES, Energy Productivity: International Energy Agency (2016), Labor Productivity: The Conference Board (2016), Carbon Footprint: Norwegian University of Science and Technology and Center for International Climate and Environment Research (2013), Ecological Footprint, Biocapacity: Global Footprint Network (2016)

Africa has the opportunity to respond to major social needs and to boost its economic development through a smart diversification of its activities, as well as through a both inclusive and sustainable model of development.

Africa is in a unique position to build resource-efficient and competitive economies based on sustainable consumption and production patterns. Particular emphasis could be put on accelerated and sustainable industrialisation, which can provide employment, enhance incomes and raise financial resources needed to stimulate growth³⁰, sustainable infrastructures and energy, agriculture, tourism and other innovative sectors such as ICT and mobile technologies.

²⁹ UNEP Live data, Material intensity (kg per dollar of GDP in USD) in 2010. Material intensity (resource per GDP) is interpreted as the sign of a inefficient and unsustainable economy, with higher values indicating environmentally inefficient economies. Dematerialisation refers to the absolute or relative reduction in the quantity of materials used and/or the quantity of waste produced in the generation of economic output.

³⁰ *Macroeconomic Policy And Structural transformation of African Economies*, United Nations Economic Commission for Africa, 2016

Enabling and promoting sustainable consumption behaviors across Africa is also essential, knowing that household final consumption expenditure reached 66,5% of GDP in Africa in 2014³¹. This is also a great challenge for a region where a large portion of the population is still struggling to meet their basic needs. In this context, environmental risks are not perceived as relevant, at the exception probably of countries already affected by climate change. In 2016, a survey conducted by UN/ODI/Ipsos MORI in 54 African countries on most important issues for African households showed that environmental issues were clearly perceived as the less important ones (climate change being the second less important issue), after education, healthcare, a honest and responsive government, better job opportunities, access to clean water and sanitation, protection against crime and violence, affordable and nutritious food³².

Regional cooperation frameworks and networks

Sustainable consumption and production is well anchored in Africa's regional cooperation frameworks and networks. Established in December 1985, the mandate of the **African Ministerial Conference on the Environment (AMCEN)** consists in providing advocacy for environmental protection in Africa; ensuring that basic human needs are met adequately and in a sustainable manner; ensuring that social and economic development is realized at all levels; and ensuring that agricultural activities and practices meet the food security needs of the region³³. In 2012, as part of "Africa's post Rio+20 Strategy for Sustainable Development", the AMCEN adopted a set of regional flagship programmes and decisions to drive sustainable development on the African continent (14th session of AMCEN). One of the flagship programmes consisted in the establishment of a **Partnership for Sustainable Consumption and Production in Africa**. The objective was to accelerate the implementation of the global 10-Year Framework of Programmes on Sustainable Consumption and Production in Africa, while replicating and up scaling successful activities and initiatives in partnership with key regional institutions such as the African Roundtable on Sustainable Consumption and Production (ARSCP), the African Union (AU), the New Partnership for Africa's development (NEPAD), the African Development Bank (AfDB), and the Regional Economic Commissions (RECs) and UN agencies. Activity areas for the African Partnership for sustainable consumption and production included:

- 1) **Seeking additional partners and securing funding for implementing and up-scaling** sustainable consumption and production in Africa, strengthening the African Roundtable on Sustainable consumption and Production (ARSCP);
- 2) **Providing capacity-building at regional and national levels, mainstreaming sustainable consumption and production** strategies and action plans in the national sustainable development agendas, and supporting continued development and implementation of relevant strategies / action plans at national and local levels, including Integrated Solid Waste (including E-waste) Management Plans;

³¹ *Africa Development Indicators 2012/13*, The World Bank, 2013

³² UN/ODI/Ipsos MORI, *The United Nations Global Survey for a Better World*, database, United Nations, the Overseas Development Institute, Ipsos MORI and partners, 2016

³³ More information on: http://www.unep.org/roa/amcen/About_AMCEN/

- 3) **Supporting and strengthening existing initiatives**, such as the African Eco-labeling Mechanism, the Sustainable Energy for All Initiative in the African region, the ABIWSI into an African Industries Water Saving Initiative.

In 2012, AMCEN also decided to undertake the review of the African 10 Year Framework Programme on Sustainable Consumption and Production, which had been launched in 2005, following the Johannesburg summit (2002) and in the context of the ‘Marrakech Process’³⁴. The initial African 10YFP emphasized the importance of linking sustainable consumption and production with the challenges of meeting basic needs and provision of sustainable livelihoods, two high priorities for the African region addressed through four main thematic priority areas: energy, water and sanitation, habitat and sustainable urban development, and industrial development.

The African Regional Roadmap for the 10YFP, developed in 2014, offers the main vehicle to accelerate the shift towards sustainable consumption and production patterns in the region through regional and national initiatives, and aims at contributing to poverty reduction and sustainable livelihood³⁵. The functions of the Regional African Roadmap for the 10YFP are identified as follows:

- Serving as the **main vehicle to support the implementation** of the 10YFP in Africa;
- **Setting shared goals** through strong political commitment and endorsement;
- **Supporting knowledge sharing**, research ,networking and collaboration;
- **Enabling strategic planning and investment** in institutions and infrastructure;
- **Leveraging resources** including from the private sector;
- **Ensuring financial and technical support** from the 10YFP matches demand from the region;
- **Capacity Building and awareness raising** through education and mobilization of civil society;
- **Strengthening partnerships** to provide a platform for bringing together development partners and stakeholders in the region to support and implement programmes and projects.

In addition to the six thematic and sectoral programmes of the 10YFP/One Planet network, the Regional African Roadmap identifies seven cross-cutting priority areas of work:

- 1) **Enabling policy frameworks;**
- 2) **Greening businesses;**
- 3) **Waste management;**
- 4) **Mobility (including transport and infrastructure);**
- 5) **Energy;**
- 6) **Water;**
- 7) **Knowledge sharing and cooperation.**

³⁴ The Marrakech Process was a global and informal multistakeholder process, launched in 2003 to promote the development and implementation of policies, programmes and projects on sustainable consumption and production; and to provide inputs for the elaboration of a 10 Year Framework of Programmes.

³⁵ United Nations Environment Programme, Africa Roundtable on Sustainable Consumption and Production, African Regional Roadmap for the 10YFP on Sustainable Consumption and Production, 2014

The African Roundtable on Sustainable Consumption and Production is the largest public platform in Africa dedicated to this challenge, with 23 institutional members and 143 individuals as regular/registered members in 46 of the 54 African countries, mostly from the non governmental sector.

Africa has also seen a number of regional dialogue and cooperation platforms for sustainable consumption and production develop for more than 10 years. This includes the **African Roundtable on Sustainable Consumption and Production (ARSCP), a regional non-governmental and not-for-profit initiative established in 2004**, aimed at facilitating the development of national and regional capacities for sustainable consumption and production and promoting implementation in African countries.

Established under the auspices of the African Ministerial Conference on the Environment (AMCEN), UNIDO and UN Environment, the ARSCP has many partners, including the EU and UN agencies such as UNICEF, the UN Development Programme (UNDP), the International Labor Organization (ILO), and others³⁶. Since the adoption of the 10YFP, the 10YFP National Focal Points, representing their governments, have been actively involved in the dialogue activities of the ARSCP, including the development of the African Regional Roadmap for the implementation of the 10YFP (2014-2024). In 2016, the African network of 10YFP National Focal Points included 31 African countries.

Working in close cooperation with the ARSCP, the **Resource Efficient and Cleaner Production network of Africa**, initiated by UN Environment and UNIDO as early as 1994, aims at building national capacities in developing countries and economies in transition to set up National Cleaner Production Centers and facilitate the mainstreaming of sustainable consumption and production practices in the business sector and value chains.

National Cleaner Production Centers have been established in more than 40 countries globally including in Africa: **Ethiopia, Egypt, Kenya, Morocco, Mozambique, South Africa, Tunisia, Uganda and Zimbabwe.**

More recently, two major cooperation and development platforms funded by the European Commission have been established to support the mainstreaming of green economy and sustainable consumption and production approaches in Africa. **SWITCH Africa Green**³⁷, established in 2014, supports the development of green businesses and eco-entrepreneurship and the use of sustainable consumption and production practices in 6 countries (Burkina Faso, Ghana, Kenya, Mauritius, South Africa, Uganda), and with a focus on agriculture, tourism, manufacturing and integrated waste management. The objective is to put in place: 1) Medium Size and Small Enterprises (MSMEs) and business service providers better equipped to seize opportunities for green business development; 2) better informed public and private consumers; 3) enabling conditions in form of clear policies, sound regulatory frameworks, incentives structures, tax, other fiscal and market-based instruments influencing key sectors. SWITCH Africa Green has three complementary components:

- The Policy Support, to support the formulation of policies, regulations and standards, and the establishment, or strengthening of relevant institutions necessary for resource efficient and green businesses to emerge and grow;

³⁶ More information on: <http://www.arscp.org> (contact: secretariat@arscp.org)

³⁷ For more information: www.switchafricagreen.org

- The Green Business Development, to support, through calls for proposals, services provided to entrepreneurs and MSMEs that enable them to start and develop green businesses, apply sustainable production practices and create trade opportunities.
- A Networking Facility, to provide project support services for networking and communication among the projects and countries.

SWITCH Med³⁸ is also an initiative funded by the European Commission to facilitate the shift toward sustainable consumption and production in the Southern Mediterranean region, including nine countries among which four are Northern African countries: including four Northern African countries: Algeria, Egypt, Libya, Morocco and Tunisia. The programme includes: trainings for start-ups and entrepreneurs; capacity building in industry service providers for SMEs; engagement with policy makers to establish a regulatory and policy framework to boost the market; and empowerment of citizens and civil society organizations to lead socially innovative solutions and a network of stakeholders for experience and knowledge sharing.

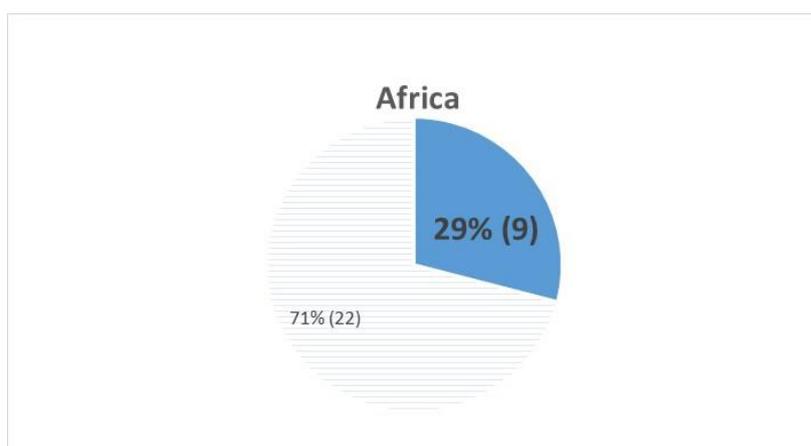
Laying the foundations for a policy baseline in Africa

This report builds on the results of the pilot survey conducted by the Secretariat of the 10YFP end of 2015, in close cooperation with 10YFP National Focal Points, to collect information on sustainable consumption and production policies at country level. It also builds on information regularly collected by the Secretariat on national policy frameworks addressing sustainable consumption and production (inventory)³⁹ as well as on reliable sources of information including key regional institutions such as the UN Economic Commission for Africa, and initiatives such as SWITCH Africa Green and SWITCH Med.

Late 2015, only nine African countries out of the 31 that had nominated a 10YFP National Focal Point (29%), had contributed to the pilot survey, including one SWITCH Africa Green country and one SWITCH Med country: **Cameroon, Cote d'Ivoire, Madagascar, Mali, Mauritius, Sao Tome and Principe, Togo, Tunisia and Tanzania.**

³⁸ For more information, please visit www.switchmed.eu

³⁹ This inventory has been developed by the 10YFP Secretariat based on information collected through the Pilot Survey on National Sustainable Consumption and Production Policies and Initiatives, as well as through other key platforms. It is not exhaustive and is regularly being updated, and therefore may not reflect all the initiatives taken by Member States at policy level to advance sustainable consumption and production.



In total, 9 countries have participated in the 2015 pilot survey, out of 31 countries with a National Focal Point and 54 countries in total

Figure 1. Participating African countries

Most of the African sub-regions are represented in this small group of countries, except for South Africa. The non-representation of this region, which plays a key role economically and environmentally in the continent, is naturally a gap that should be addressed in the future and taken into account in any conclusion drawn from the pilot survey. Participating countries are relatively diverse in terms of population size: from 190,000 in Sao Tome and Principe (the least populated African country) to more than 53 million in Tanzania. They also count among them six countries with “low human development”, by standards of the Human Development Index (Mali, Ivory Coast, Togo, Madagascar Cameroon and Tanzania), one with “medium human development” (Sao Tome and Principe); and two with “high human development”, including a Northern African country (Tunisia) and Mauritius.

Through complementary sources of information, as mentioned above, information on national sustainable consumption and production policy frameworks was collected for another 12 African countries, including Algeria, Burkina Faso, Egypt, Ethiopia, Gabon, Ghana, Kenya, Mozambique, Rwanda, South Africa, Uganda, Zambia.

The full group of countries considered in this chapter, including countries having responded to the pilot survey and additional countries, is relatively balanced regionally. The whole group is also well balanced with regards to the McKinsey Global Institute’s Stability Index mentioned above, with 7 countries from the “stable growers” sub-group (high growth, stability), 7 countries from the “vulnerable growers” sub-group (high growth, vulnerability) and 5 countries from the “slow growers” group (slow growth). In total, 11 of those countries have a “low human development”, by standards of the Human Development Index, 7 have a “medium human development” and only 3 a “high human development”.

Table 2. Countries considered in the report and key indicators

Country	Sub-region	Population (thousands) [1]	GDP per capita [2]	HDI 2015 [3]	Average annual HDI growth (2010-2015) [4]
Algeria	Northern Africa	39,667	4,794	0.745 (high)	0.56
Burkina Faso	Western Africa	18,106	645	0.402 (low)	1.27
Cameroon	Central Africa	23,344	1,303	0.518 (low)	1.27
Egypt	Northern Africa	91,508	2,707	0.691 (medium)	0.6
Ethiopia	Eastern Africa	99,391	486	0.448 (low)	1.71
Gabon	Central Africa	1,725	10,752	0.697 (medium)	0.97
Ghana	Western Africa	27,410	1,697	0.579 (medium)	0.88
Ivory Coast	Western Africa	22,701	1,496	0.474 (low)	1.43
Kenya	Eastern Africa	46,050	1,134	0.555 (medium)	0.9
Madagascar	Eastern Africa	24,235	410	0.512 (low)	0.33
Mali	Western Africa	17,600	721	0.442 (low)	1.82
Mauritius	Southern Africa	1,263	9,469	0.781 (high)	0.89
Mozambique	Southern Africa	27,978	512	0.418 (low)	1.03
Rwanda	Eastern Africa	11,610	690	0.498 (low)	1.4
Sao Tome and Principe	Central Africa	190	1,293	0.574 (medium)	1
South Africa	Southern Africa	54,957	7,593	0.666 (medium)	0.89
Tanzania	Eastern Africa	53,470	842	0.531 (low)	1.27
Togo	Western Africa	7,304	554	0.487 (low)	1.32
Tunisia	Northern Africa	11,108	4,329	0.725 (high)	0.29
Uganda	Eastern Africa	39,032	673	0.493 (low)	0.66
Zambia	Southern Africa	16,212	1,607	0.579 (medium)	1

Max (world)	NA	1,371,220	106,409	0.949	2.67
Max Africa	NA	182,201	13,618	0.782	2.67 (Zimbabwe)
Min (world)	NA	10	207	0.352	-3.68 (Syria)
Min Africa	NA	190	207	0	-1.06 (Libya)
Total / average (world)	NA	7,347,000	10,194	0.717	0.61
Total Africa	NA	1,186,000	NA	0.523 (sub- Saharan Africa)	1.04 (sub- Saharan Africa)

Source: [1] Population and [2]GDP per capita (constant 2010 USD): The World Bank Group (2016); [3] and [4] HDI: United Nations Development Programme (2016),

These countries also form an interesting group from an environmental and resource efficiency standpoint. Gathering 21 out of 54 Africa countries, the annual domestic extractions of the group represents nearly 50% of all the domestic resources extracted by the whole region every year, although there are huge disparities within the group. Such disparities can also be observed in terms of material intensity as well, with an average of 5,4 kg per dollar of GDP in USD, which is nearly twice more than the African region as a whole, showing a great potential to improve resource efficiency throughout their production processes. Disparities can be observed within the group in terms of material footprint per capita, with nine countries below the African average of 2.86 tonnes per capita, and 12 countries above⁴⁰.

Finally, within this group of 21 countries, 14 are in environmental deficit, with five countries presenting a deficit above world average Mauritius (2.64), South Africa (-2.26), Algeria (-1.79), Egypt (-1.46) and Tunisia (-1.39). On the other hand, 7 countries within the group have an “ecological reserve” (biocapacity greater than ecological footprint): Gabon (+23.74), Madagascar (+1.57), Mozambique and Zambia (+1.06), Cameroon (1.06), Ivory Coast (+0.41) and Mali (+0.08).

⁴⁰ All data have been collected on UNEP Live for the year 2010.

Table 3. Domestic Extraction, Domestic Material Consumption, Material Footprint, Material Intensity, Ecological footprint

Country	Domestic extraction (Total tonnes) 2010	Domestic material consumption (Total) 2010	Material Footprint (Total) per capita (Tonnes per capita) 2010	Material Intensity (Total) (kg per dollar of GDP in USD) 2010	Ecological footprint per capita (gha per person) 2013	Biocapacity per capita (gha per person) 2013
Algeria	373,176,064	298,421,440	3.1	2.55	2.38	0.59
Burkina Faso	53,194,792	55,298,000	3.08	7.75	1.19	0.97
Cameroon*	66,574,204	65,078,624	1.83	3.4	1.16	1.64
Egypt	687,113,216	694,026,688	6.21	5.44	1.96	0.5
Ethiopia	224,450,208	231,322,224	0.03	11.35	1.01	0.57
Gabon	19,458,592	4,283,876	4.14	0.42	2.45	26.19
Ghana	132,782,904	141,939,888	3.28	6.09	1.92	1.29
Ivory Coast*	48,516,536	48,730,956	1.01	2.56	1.22	1.63
Kenya	132,449,656	135,066,752	3.05	5.03	1.03	0.52
Madagascar*	47,026,472	48,412,380	0.88	8.34	0.95	2.52
Mali*	72,148,984	76,274,392	4.27	10.91	1.3	1.38
Mauritius*	11,384,571	13,938,493	16.68	1.71	3.33	0.69
Mozambique	50,806,672	49,848,216	1.55	4.61	0.84	1.9
Rwanda	21,837,156	21,749,482	2.38	5.83	0.87	0.56
Sao Tome and Principe*	464,902	562,798	7.1	3.3	1.62	0.95
South Africa	681,346,240	639,635,008	8.75	2.13	3.37	1.11
Tanzania*	116,615,936	120,774,280	1.39	4.87	1.25	1.01
Togo*	18,502,152	18,294,848	2.1	7.43	1.01	0.43
Tunisia*	95,075,856	97,788,552	6.02	2.05	2.18	0.79
Uganda	100,558,384	103,828,560	2.67	5.73	1.22	0.57

Zambia	109,953,376	111,164,944	3.23	11.34	0.97	2.03
Africa	6,310,719,130	6,038,058,546	2.86	3.07	1.4	1.23
Asia Pacific	37,049,336,362	38,075,744,187	9.13	2.73	2.32	0.77
Latin America	7,458,839,094	6,846,134,202	10.32	2.05	2.75	5.31
North America	6,808,459,108	6,954,869,028	27.14	0.46	8.61	5.02
World	71,431,317,218	71,274,515,079	10.1	1.33	2.87	1.71

*Source: UNEP Live (Domestic extraction, Domestic material consumption, Material Footprint (Total) per capita, Material Intensity), 2010 data and Global Footprint Network (Ecological footprint per capita and biocapacity per capita) 2013 data.

**With *, countries that have participated in the 2015 10YFP Secretariat's pilot survey on national sustainable consumption and production policies and initiatives.

Enabling conditions for change: the policy landscape for sustainable consumption and production in Africa

The development of overarching policies with objectives to support the shift towards sustainable consumption and production patterns, or the integration of these objectives into national (sustainable) development strategies, is a relatively recent phenomenon in Africa, as in other regions. A report from the UN Economic Commission of Africa in 2009 indicated that policies specifically targeting sustainable consumption and production patterns had not yet been developed in the region⁴¹. The report further noted that African countries tended to focus on sustainable development and sound environment management, through crosscutting or sectoral policies, with a strong focus on pollution control, rather than on integrated approaches. One exception was presented as a unique case of national legislation for sustainable consumption and production: the Uganda's National Environment and Waste Management regulations of 1999. According to this report, the development of national programmes on sustainable consumption and production patterns really started a few years later, in 2007, with pioneer countries such as Mauritius and Tanzania.

Since 2009, an increasing number of national policies aimed at advancing sustainable development, green economy and sustainable consumption and production have emerged in the region. **In 2015, all the African countries that participated in the pilot survey on national policies and initiatives reported that sustainable consumption and production was addressed in their existing national policies. Five of them referred to specific and targeted policies, such as National Action Plans (Ivory Coast⁴², Mali⁴³, Mauritius, Tanzania and Tunisia). Four of them referred to other national strategies – e.g. national green economy strategies – addressing sustainable consumption and production as a key priority (Cameroon, Madagascar, Sao Tomé et Príncipe and Togo).**

The 10YFP Secretariat inventory of national policy frameworks integrating sustainable consumption and production worldwide, also shows that, between 2007 and 2016, at least seven additional African countries had developed or were developing specific national strategies or policies, **including Algeria (2017), Rwanda (2014), Ghana (2014), Uganda (2011), Zambia (2011), Burkina Faso (2010) and Egypt (at local level, in 2008).**

In addition, at least another 6 countries had included sustainable consumption and production, sometimes as the number one top priority, in their national (sustainable) development and/or green economy strategies:

- **Ethiopia (2011)**, through its Climate-Resilient Green economy strategy, and its sectoral priorities including agriculture, forestry, power, transport, industrial sectors and buildings.

⁴¹ *Report of the Sixth Session of the Committee on Food Security and Sustainable Development (CFSSD-6)/ Regional Implementation Meeting (RIM) for CSD-18 Africa Review Report on Sustainable Consumption and Production*, Addis Ababa, 27 – 30 October 2009 (ECA/FSSD/CFSSD/6/16)

⁴² Due to the political context, the national action plan was not adopted.

⁴³ In the case of Mali, the National Action Plan was reported “under development” in 2015.

- **Ivory Coast (2011)⁴⁴, Togo (2011), South Africa (2011), Gabon (2014) and Madagascar (2016)** through their National Sustainable Development Strategy. In Ivory Coast and in Gabon, sustainable consumption and production is one of the driving principles identified to achieve sustainable development in the country. In Togo, strengthening economic development and promoting sustainable consumption and production patterns constitutes the first axis of the strategy. In South Africa, sustainable consumption and production is part of nine key focus areas.
- **Mozambique (2012) and Kenya (2015)** through a Green Economy Strategy and Implementation Plan with a strong focus on resource efficiency, infrastructures and sustainable livelihoods. **Rwanda (2011)** also adopted a Green Growth and Climate Resilience National Strategy for Climate Change and Low Carbon Development, with the objective of developing a climate-resilient, low carbon economy by 2050. **Ivory Coast developed a Green Economy Roadmap in 2013.**

Over the last 10 years, Africa has made a lot of progress in designing policy instruments aimed at supporting the shift towards sustainable consumption and production, with the objective of creating the conditions for a smarter economic growth and development. **In total, between 2007 and 2016, at least 12 African countries have developed a specific national policy, and 10 countries have mainstreamed sustainable consumption and production in other key national strategies.** Mauritius and Tanzania were pioneers in terms of developing a national action plan in 2007, when the most recent countries having engaged on that route are Algeria (2017), Tunisia (2016) and Rwanda (2014). Seven African countries developed a national action plan or mainstreamed sustainable consumption and production in other national policy frameworks in 2011, at the eve of the Rio+20 Conference and adoption of the 10YFP, including Ethiopia, Gabon, Ivory Coast, Togo, Uganda, Zambia and South Africa. In total, sustainable consumption and production has been addressed at national and cross-sectoral level in at least **21 of the 54 African countries, nearly 40% of them.**

Out of 21 African countries considered, 57% have or are developing a specific national action plan, 47% have integrated sustainable consumption and production as a key development priority within their national sustainable development strategy and 38% in their national green economy strategy.

⁴⁴ Although this strategy was not adopted.



MAP 2. African countries with policies addressing sustainable consumption and production

Future research on policy development and implementation for sustainable consumption and production in Africa should help complete the picture, by integrating into the review more specific framework instruments, not necessarily led by Ministries of Environment, such as Madagascar’s policy on green exports, led by the Ministry of Commerce and Consumption⁴⁵, which could have a major impact on the shift towards sustainable consumption and production. Another example is the **South African Green Economy Accord**, which aims at creating at least 300,000 green jobs by 2020 with a target of 80 percent of new jobs to go to young workers, who face high levels of unemployment. The Accord agreed between business representatives, labor unions, and government involves 12 commitments, including support for biofuels through

⁴⁵ *Ministere Du Commerce et De La Consommation, Examen National de l’Export Vert (ENEV) of Madagascar*, <http://www.commerce.gov.mg/2016/11/07/examen-national-de-lexport-vert-enev-a-madagascar/> (accessed June 2018)

regulatory measures and assistance to small farmers; retrofitting buildings; increased use of renewable energy; waste recycling; investment in mass transit; and various green finance facilities⁴⁶.

Five sectors constitute high priority for a large majority: Cities / Buildings and Construction, Energy, Food and agriculture, Industrial development, Water and Transports

With regards to the **priority sectors identified in National Action Plans or national development strategies identifying sustainable consumption and production as a priority, the analysis of 15 countries' policy documents shows the following⁴⁷:**

- **Five sectors constitute high priority for a large majority of countries, including Cities / Buildings and Construction (80%), Energy (73%), Food and agriculture (60%), Industrial development, Water and Transports, (47%);**
- Another four sectors are identified as high priorities for more than 1/3 of the 15 countries: sanitation and education equally (40%), forestry and tourism (33%);
- Waste management appears as a priority for slightly more than 25% of those countries (27%).

These priorities illustrate the importance and relevance of the sectors and themes addressed through the 10YFP programmes, in particular Sustainable Buildings and Construction, Sustainable Food Systems, Sustainable Tourism and Sustainable Lifestyles and Education, especially considering the importance of young people in Africa. Africa's young population structure indeed represents a particular challenge as they have a key role to play in supporting the transformation of African countries' economies towards sustainability. Other priorities, such as those focused on resources (energy, water and waste), are transversal issues that can be addressed across the 10YFP programmes.

Identified priorities are in line with some of the greatest challenges Africa's development is facing, including rapid urbanization, the need to ensure fair and safe access to food, energy and water, to give opportunities to young African people, as well as to support agriculture as one of the most important economic sectors of the region.

Sustainable consumption and production is also perceived as a paradigm that can play a driving role in diversifying African economies through industrial development and sustainable products, as well as through emerging economic sectors that have had growing importance for the region, such as tourism.

⁴⁶ *Green Economy Inventory for South Africa: An Overview*, Department of Environmental Affairs, Republic of South Africa, International Labor Organization and UN Environment, 2017

⁴⁷ Policy documents were not available Cameroon, Ghana, Mali, Sao Tomé et Príncipe or not yet developed in the case of Algeria. No priority sector was identified in the National Policy for Environment and Sustainable Development of Madagascar.

Table 4. Priority sectors identified in national policy frameworks addressing sustainable consumption and production in 15 African countries

Date	Country / policy	Cities / Buildings & Construction	Energy	Food and agriculture	Industrial development	Transport	Water
2007	Tanzania (10 Year Programme on SCP, 2007)	x			x		x
2008	Egypt (SCP Programme for Cairo, 2008)	x			x	x	
2010	Burkina Faso (10 Year Action Plan for the Promotion of SCP, 2010)	x	x	x		x	
2011	Ethiopia (Ethiopia's Climate-Resilient Green economy strategy, 2011)	x	x	x	x	x	
2011	South Africa (National Strategy for Sustainable Development and Action Plan 2011-2014)	x	x	x		x	x
2011	Uganda (National Programme on SCP, 2011)	x	x	x	x	x	x
2011	Zambia (National Programme on SCP, 2011)		x	x	x		x
2013	Ivory Coast (Green Economy Roadmap, 2013)	x					
2013	Mauritius (National Programme on SCP (2008) and "Maurice Ile Durable" (MID) framework (2013))	x	x		x		x
2013	Mozambique (Green Economy Road Map (2012) (2012-2030), Action Plan for a Green Economy (2013))	x	x	x		x	x
2013	Togo (National Strategy for Sustainable Development, 2013)		x				
2014	Gabon (Law n° 002/2014 on sustainable development, 2014)		x	x			
2014	Rwanda (National SCP programme, 2014)	x	x				
2015	Kenya (Green Economy Strategy and Implementation Plan (GESIP), 2015)	x	x	x		x	x
2016	Tunisia (National Action Plan on SCP – Agriculture and Tourism, 2016)			x	x		

**Source: Pilot Survey on National Sustainable Consumption and Production Policies and Initiatives (2015) and 10YFP Secretariat's review of national related policy frameworks*

The sustainable consumption and production terminology is frequently used in African policy frameworks relevant to sustainable development in general, and often coexist with similar notions such as green economy. The information collected through the pilot survey conducted by the 10YFP Secretariat in 2015 also shows that, for most of responding countries, sustainable consumption and production is in fact already addressed in many policies and strategies, either at cross-cutting or a sectoral level.

Sustainable consumption and production is easily understood as a broad, transversal and inclusive approach, which can encompass many of the instruments mobilized to transform economic development and societal models into sustainable ones.

For instance, in Mali’s development and environment policy landscape, more than 10 national policies are being reported as addressing sustainable consumption and production objectives, from a Strategic investment framework for a green and climate resilient economy to the national industrial or housing policy of the country. In the case of Mauritius, more than 15 policy frameworks are associated with sustainable consumption and production, beyond the National Action Plan, from the Energy Efficiency Act (2011) and Long Term Energy Strategy (2009-2025), to the Food Security Fund Strategic Plan (2013-2015) or the Fisheries Master Plan for Mauritius (2011-2020). In Tanzania, more than 10 national policy frameworks, cross-cutting and sectoral, complement the National Programme on sustainable consumption and production and are seen as contributing directly to supporting the shift.

According to the pilot survey results, sustainable consumption and production is most often perceived as being addressed in sustainable development (26%), poverty reduction (19%) and environmental protection (19%) policy frameworks as well as in energy (26%), tourism (22%), food and agriculture (18%), buildings and construction (17%) and public procurement (17%) sectoral policies, which is in line with the priorities identified above.

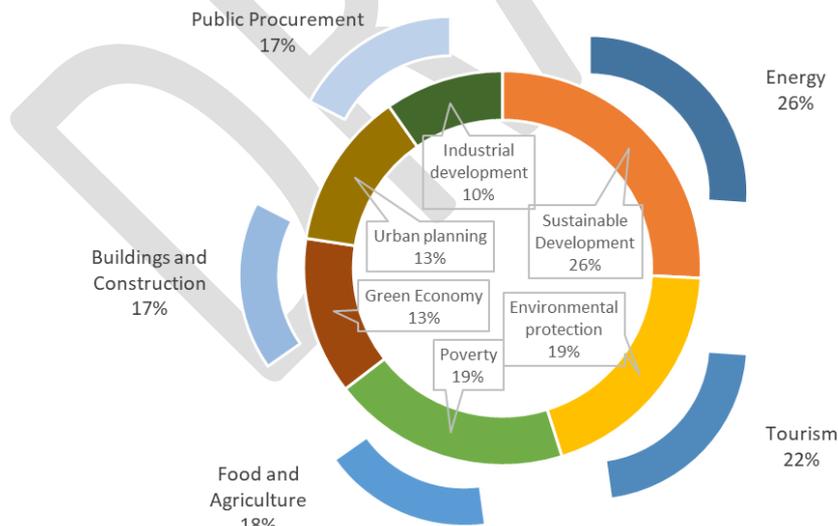


Figure 2. Structural and sectoral policies frequently addressing sustainable consumption and production according to 9 African countries

Source: Pilot Survey on National Sustainable Consumption and Production Policies and Initiatives, 2015

“For most of the continent, promoting green growth means addressing existing and emerging development challenges in a manner that does not deplete Africa’s natural capital nor leaves economies and livelihoods more vulnerable to climate change and other environmental, social and economic risks.” Mozambique Green Economy Road Map (2012) (2012-2030), Action Plan for a Green Economy (2013)

Why are African countries pursuing sustainable consumption and production objectives, as a development priority? The analysis of the 15 countries’ policy documents already referred to shows that justifications and motivations are diverse. For nearly half of those countries, the shift to sustainable consumption and production patterns is **an opportunity, or sometimes a condition, to achieve structural transformation objectives, with great economic and development ambitions.** In Gabon, the aim is to *“encourage the adoption of policies promoting an inclusive green economy and likely to contribute to achieving structural transformation objectives”* (Law n° 002/2014 on sustainable development in the Republic of Gabon, 2014).

For as many countries as Ethiopia, Ivory Coast, Kenya, Mozambique, Rwanda and Zambia (all of them already experiencing high growth), the objective is to achieve middle income status and high rates of economic growth, through a new sustainable growth model leading to job creation and improvement of living conditions. The *Zambian National Programme on sustainable consumption and production* affirms that *“By 2030, Zambia aspires to live in a strong and dynamic middle-income industrial nation that provides opportunities for improving the well being of all and have a productive environment and well conserved natural resources base for sustainable socio-economic development.”* (2011). *Ethiopia’s Climate-Resilient Green Economy Strategy* also recognizes that *“building a green economy should thus result in the creation of a competitive advantage out of a focus on the sustainable use of resources and a higher productivity growth.”* (2011).

Analysing the costs of inaction as opposed to investing in the shift towards a green economy and sustainable consumption and production also provides strong reasons for transforming the policy infrastructure at national level. **Sustainable consumption and production is recognized as a source of opportunities, including through developing entrepreneurship, green and decent jobs, food and energy security, innovation and technology transfer, as well as inclusive governance for a better share of benefits across society.** Thus, *Kenya’s Green Economy Strategy and Implementation Plan (GESIP)* states that *“Kenya will realise faster economic growth in the long run; the national real GDP is projected to exceed the baseline by 6-19 per cent by 2030.”* (2015). In this context, **only a minority of countries mention explicitly social benefits associated to the shift to sustainable consumption and production, green economy or sustainable development more broadly, including Mauritius, a country that aims at developing a “safe, fair, equitable and sustainable place for generations to come”, while improving its resilience to climate change (“Maurice Ile Durable” (MID) framework, 2013).** In the case of Mauritius, addressing sustainable consumption and production in the national policy framework also aims at addressing the challenges already resulting from rapid economic growth: *“There is a need to review how the nation can move towards a state in which economic and social progressions prevail, but not at the expense of the already delicate local and global environment.”* (*Maurice Ile Durable” (MID) framework, 2013).*

A number of national policy frameworks, among those that could be analyzed, are presented as instruments to overcome the barriers that many African countries are still facing: **“Despite the**

country's positive growth indicators, many challenges still lie ahead, especially as the country tries to transform its largely agrarian based subsistence economy into a middle income service based economy by the year 2020 as envisioned in the country's Vision 2020." (Rwanda National Sustainable Consumption and Production Programme, 2014). Africa's vulnerability is highlighted in the policy documents of countries such as Burkina Faso, Gabon, Mozambique (three 'vulnerable growers') and Uganda, the main challenges of the region being well identified: high levels of poverty and inequalities, lack of diversification resulting in high dependency of national economies on low-value commodities and natural resources, environmental damages and depletion of natural resources on which most of the population depends, including through the direct consequences of climate change. As an example, the 10 Year Action Plan for the Promotion of Sustainable Consumption and Production in Burkina Faso (2010) observes that "Despite the efforts made, there is a continuing degradation of ecosystems and a gradual depletion of natural resources due to the increasing pressure exerted on them by a poor population, whose vital needs depend on, and especially due to consumption and production patterns".

In a few cases, **implementing an integrated and systemic approach** is also a strong reason for addressing sustainable consumption and production through national strategies. This reflects a strong recognition of the fact that "**individual policies and activities-no matter how innovative - stand little chance of bringing about wholesale changes in consumption and production patterns**" (Mauritius National Action Plan on Sustainable Consumption and Production 2008-2013).

The South African National Strategy for Sustainable Development and Action Plan (2011-2014) went further in integrating and addressing multiple issues, including sustainability, economic prosperity, but also reliance, democracy and human needs, using the strategy as a tool to enhance integrated planning and implementation at country level.

Finally, **nearly half of the countries reflected through the policy documents analyzed here make strong references to the international agenda on sustainable consumption and production** and key initiatives, including the Marrakech Process and the 10-Year Framework of Programmes. This illustrates the positive influence that international cooperation has had on national policies in this region, including through financial and technical assistance.

Are national policy frameworks addressing sustainable consumption and production strongly supported politically in Africa? Several indicators or signals can be looked at to answer this question: 1) the mandate of the institution that is at the initiative of the policy framework or the level of political support provided to the initial phases of development of the policy framework; 2) the positioning of the policy framework within the overall development policy landscape at national level, and 3) inclusiveness, especially with regards to governmental institutions.

A number of the national policies and other strategies addressing sustainable consumption and production as a key component, identified through the 10YFP Secretariat's pilot survey and inventory, have received **political support at the highest level** from the start. For instance, the project of developing an action plan for Cairo on Egypt was approved by the Minister of Environment (2007), and the National Steering Committee for the development of the action plan was established by a Ministerial decree. In Tanzania, the development and implementation of the 10 Year Programme (2007) as well as other environmental programmes and projects, are conducted under the aegis of the Vice-President Office. The development of Ethiopia's Climate-Resilient Green Economy Strategy was led by the Prime Minister's Office – thanks to this high

level commitment, significant resources could be directed to engaging more than 50 experts from 20 leading governmental institutions in seven thematic committees, directed by a Ministerial Steering Committee gathering State Ministers and senior officials. In Mauritius, the Commission on “Maurice Ile Durable” (2013) operates under the aegis of the Prime Minister’s Office, interacts with implementing Ministries.

The way specific policies or sustainable development policies addressing sustainable consumption and production fit in the overall national policy landscape also reflects the political importance that they are given. **Anchoring those policies in the context of the national development strategies reflects a high political commitment.** This is the case in Tunisia, of which the National Action Plans on Sustainable Consumption and Production refers to the new Constitution of 27 January 2014, article 12: “the state works towards achieving social justice, sustainable development, regional balance and sound management of national wealth”. In Gabon, green economy activities are being implemented as part of the Strategic Plan Emerging Gabon (since 2009), aimed at enabling the structural transformation of the country’s economy. In Another example is Kenya’s Green Economy Strategy and Implementation Plan (2015), which refers to the country’s national strategy for development – Kenya Vision 2030 – as well as to the Constitution of Kenya (2010), which recognizes a clean and healthy environment as a basic human right. The Green Economy Roadmap of Mozambique (2012) also refers to the Constitution and was launched on the occasion of a high level side event at Rio+20 by the President of Mozambique himself, and to the long-term National Development Strategy of Mozambique (2015-2035).

Sustainable consumption and production, green economy and more broadly sustainable development approaches are often associated with a model for establishing decompartmentalised portfolios, policies and actions, in other words new governance models.

Inter-ministerial and multi-stakeholder consultations are very often, if not systematically, recognized as an essential dimension of sustainable consumption and production policy design, even though this principle materializes in various ways. In Burkina Faso, the 10 Year Action Plan for the Promotion of Sustainable Consumption and Production was developed based on interviews conducted with about 10 different ministries. In Ethiopia, several sectoral teams, involving more than 50 experts from more than 20 leading government

institutions, drove the development of the country’s Climate Resilient Green Economy Strategy. In Kenya, the Green Economy Strategy and Implementation Plan was produced through a participatory and consultative process involving the national government, 47 county governments, development partners, private sector and civil society organizations. Likewise, in Mauritius, a national consultation process was launched with the objective of inviting every Mauritian citizen to participate in the formation of the Mauritian National Policy for Sustainable Development. Few years earlier, multi-stakeholder working groups had been formed to develop Mauritius’ Action Plan on Sustainable Consumption and Production.

Recognizing the necessity to adopt an integrated and transversal approach to enable the shift to sustainable consumption and production is however not enough to make it happen. National programmes or action plans are seen as powerful instruments to start tackling sustainable consumption and production issues in a systematic and integrated way, across sectors. They can serve a decision-making tools, and provide financing institutions and mechanisms a coherent agenda of useful activities and projects to be implemented. Developing and adopting a national action plan is often a first step towards addressing and mainstreaming

For implementation to be successful, green economy and sustainable consumption and production objectives must be mainstreamed in policy planning and budgeting processes, at both cross-cutting and sectoral level, which requires a real shift in practices towards coordinated and collective action.

sustainable consumption and production as a key development objectives. In several cases among the African countries involved in this study, such as Mauritius, this first step has been followed by the integration of sustainable consumption and production into broader policy frameworks as well as into sectoral policies at national level.

Despite strong political support attached to the initial phases of the policy development, the low level of implementation or follow up actions in many cases shows that political support may actually not be enough, and that designing a policy does not automatically results into its implementation.

A number of recurrent obstacles to implementation are frequently identified during the design phase of the policy, including: the lack of coordination and communication among actors, insufficient law enforcement, lack of technical capacities and scientific knowledge with regards to resource consumption and associated economic costs or benefits, as well as a lack of financial resources available for implementation.

Mauritius

Pioneering the mainstreaming of sustainable consumption and production objectives

In Mauritius, Sustainable Consumption and Production is an important driver to better manage the country's fragile environmental assets, combat climate change and promote environmental stewardship. Shifting towards sustainable consumption and production supports the country's aspiration for a more resource efficient development and economic strategy. Mauritius has been among the pioneers in mainstreaming sustainable consumption and production into national policy frameworks and objectives.

The country has taken a bold step to reorient its policies by adopting a mix of policy instruments: legal and regulatory, economic and financial, and voluntary. This includes reviewing the existing practices, reshaping development strategies, and redirecting investments as a corrective step moving forward. In practice, the country attempted to mainstream sustainable consumption and production principles in major sectors of the economy and areas such as agriculture, energy, manufacturing, tourism or water through various approaches including eco-innovation and labelling or sustainable trade.

One of the government's ambitions has been to integrate **Small and Medium Enterprises (SMEs), which represent 48% of total employment**, into the backbone of its economic transformation. At the time of this report, the government was finalizing a 10 Year Master Plan for Small and Medium Enterprises aimed at greening this sector and create competitive advantages along the value chain.

Prior to the SWITCH Africa Green project,⁴⁸ Mauritius was already implementing sustainable consumption and production projects with support from UN Environment and in partnership with the European Union (EU) through different support agreements. The country also benefited from the GEF/SIDS⁴⁹ Dock funds for the energy efficiency sector.

The National Programme for Sustainable Consumption and Production

With support from UN Environment, the Ministry of Environment⁵⁰ and the National Development Unit (NDU) developed a National Programme for Sustainable Consumption and Production - “Achieving with Less” - for Mauritius (2008 – 2013)⁵¹. The programme’s primary objective was to: (1) **decouple economic growth from the use of natural resources** by increasing resource efficiency, (2) **change consumption patterns** through technological shifts and behavioral changes, (3) **increase the demand and supply of sustainable products and services** in the market, (4) promote and adopt more **sustainable lifestyles and consumption** choices. This national programme focused on five strategic priorities such as resource’s use efficiency (with a focus on energy, water and sustainable buildings and constructions), education and communication for sustainable lifestyles; increased market supply and demand for sustainable products. **Key success factors** included: having a **multi-stakeholder coordination** process in place, building the programme based on **existing national strategies** and **setting clear objectives and targets**. Indicators were identified to monitor and evaluate the progress achieved in the implementation of the programme. Those indicators continue to be considered important tools to monitor the interfaces of the economy, environment, and social aspects including the link between resource use and waste flows that result from consumption and production activities.

In June 2008, the “**Maurice Ile Durable**” Fund was established under the Finance and Audit Act, as a specialized fund with the objective of financing projects, schemes or programmes orientated to support the shift to sustainable consumption and production.

Achieving sustainable consumption and production in sectoral policies and innovation

The National Sustainable Consumption and Production Programme layed out solid grounding to formulate Mauritius’ sectoral policies and initiatives. The country has been receiving support from the EU funded project SWITCH Africa Green for its agriculture, manufacturing, and tourism sectors. Other crosscutting themes that the country aims to focus on are waste, water conservation, energy, and procurement. Through ambitious targets and innovative approaches, Mauritius has been promoting the shift to sustainable consumption and production on many fronts:

- **In the energy sector**, the country is a part of the Global Fuel Efficiency Initiative, which aims to achieve **fuel efficiency by 2050**. Mauritius' commitment is evident through the ambitious target it has set: to reach **35% renewable energy in its energy mix and 10% energy efficiency in the electrical sector**. Power production has always been a major priority for Mauritius, and the government is investing considerably in this sector to decrease its

⁴⁸ SWITCH Africa Green commencing in January 2014.

https://www.switchafricagreen.org/images/SWITCH_Africa_Green_Project_Description.pdf

⁴⁹ GEF/SIDS is Global Environment Facility/ Small Island Developing States

⁵⁰ Ministry of Environment and Sustainable Development in 2015

⁵¹ Ministry of Climate Change and Environment and National Development Unit of Mauritius. National Programme on Sustainable Consumption and Production (SCP) for Mauritius (2008 - 2018), 2008.

<http://www.oneplanetnetwork.org/resource/national-programme-sustainable-consumption-and-production-scp-mauritius-2008-2013>

dependence on fossil fuels. As a first step, an institutional set up was consolidated through the creation of the Mauritius Renewable Energy Agency (MARENA) to promote both the target and the development of renewable technologies. The government implemented an economic instrument in the form of “grants” to promote solar water heaters and photovoltaic panels to support the shift towards household renewable energy use.

- As an island state, **tourism** represents a vital sector and a major contributor to the Mauritian economy. The country’s Sustainable Tourism Strategy focuses on enhancing the quality of service and protecting tropical biodiversity while suggesting measures to protect the environment. The Strategy promotes resource efficiency and integrating sustainability practices such as grey water reuse, composting waste, and increasing efficiency in buildings. In this sector, the country has been able to experiment innovative and voluntary schemes involving eco-labels and standards.
- In the **agriculture and food sectors**, the government has been also promoting integrated farming models by offering opportunities to combine livestock farming, waste processing and bio-farming, which sets the baseline towards the shift to sustainable consumption and production. Moreover, the government is adopting the concept of a “packhouse” to allow small producers to get into the supply chain by developing a label for local agricultural products for domestic consumption.
- Other examples of ambitious targets include the **waste sector**: the country aims at redirecting 30% of solid waste from landfills through recycling and composting.
- Mauritius is a pioneer in Africa in the adoption of **green taxes as economic and financial policy instruments** to address pollution. Its vehicle ownership taxation system has been revamped to encourage the use of lower capacity engines and a form of carbon taxation is in place. Some environmental protection fees are imposed on different types of waste as well.

Acknowledging and building on good results

Eight years into implementation, sustainable consumption and production principles have been mainstreamed into the mandate of the country’s Ministries while also being implemented across sectors:

- **Promoting energy efficiency** in all sectors of the economy has been a highly successful initiative for Mauritius. Through the Energy Efficiency Act 2011 and the establishment of the Energy Efficiency Management Office (EEMO) to ensure that resource efficiency is being sustained in all sectors of the economy. The Energy Efficiency Management Office has the target of reducing 10% of the energy consumption by 2025 and has successfully implemented many specific projects such as the **Development of Minimum Performance Standards for Household Appliances and Energy Audits** in energy-intensive industries. Many local Auditors have been trained to carry out audits in the industry.
- With the assistance of the European Union, the country has developed a framework to support sustainable buildings, which consists of **Building Rating Systems**. This framework has been **integrated into the Building Control Act** and initially targets public buildings. As a result, **all public buildings today are being designed based on the criteria established in the framework**.
- One significant achievement was the **integration and mainstreaming of sustainable consumption and production concepts in teaching and learning materials** at both primary

and secondary school levels. The objective of this initiative was to ensure that children were taught about sustainable development principles at an early age to shape their behavior and mindset as responsible citizens. In the wider public sphere, awareness raising has been effective in changing citizen behavior. **More people are engaged in popular activities such as composting, rainwater harvesting, adopting renewable and energy efficient devices, backyard and rooftop gardening as well as recycling.**

- In 2014, with the financial assistance of the “Maurice Ile Durable” Fund, the Government developed an **Eco Label Certification (MS165:2014) as the Mauritian Standard on Sustainable Tourism**, which was adapted from the Eco-Mark Africa and the Global Sustainable Tourism Criteria. The Mauritian standard takes into account local specifics and context while targeting certification for tourism operators. To this date, several hotels have already achieved this certification as well as Green Globe certification.

Success factors in Mauritius

Awareness of the threats and country’s vulnerability

At a very early stage, Mauritius recognized its highly vulnerable position in the global arena as a Small Island Developing state (SIDS). The country has limited capacity and resources, leading to a small scale economy, as well as its exposure to natural disasters and external crises (e.g. high volatility of fuel and food prices). Its rapid economic development has resulted in the degradation of its natural environment which has led to higher pollution levels, loss of biodiversity and ecosystem services, or reduced soil fertility.

Political commitment and experience

Political commitment to ‘do things differently’ has been strong through different global environmental and social crises. Transformation from ‘business as usual’ to a more innovative approach by reorienting policies, reshaping development strategies, reviewing practices, and redirecting investment has been both urgent and existential. To this end, the government embarked on progressive economic reform, which shaped a new development paradigm for an inclusive green economy.

A strong and multi-level coordination mechanism

One of the first actions Mauritius took to embed sustainable consumption and production into its national policies, was to establish a National Coordination Committee, with the Ministry of Environment acting as the coordinating body. The Permanent Secretary of the Ministry of Environment, with an objective to bring all the relevant stakeholders together, chaired the committee. It aims to ensure that all relevant stakeholders understood the national perspective and the National Sustainable Consumption and Production Programme. The Implementing Agencies for sustainable consumption and production projects were also required to set up a Steering Committee at their own level. For example: a Steering Committee was set up under the leadership of the Ministry of Public Infrastructure for the development of a Framework for Sustainable Buildings and Construction. At the same time, the Procurement Policy Officer chaired the Steering Committee for the Sustainable Public Procurement project. This approach allowed the Steering Committee members to take the lead, have ownership of the project and to assure the mainstreaming of sustainable consumption and production in key priority areas.

The institutional coordination mechanism in the country was organized specifically to facilitate the liaison between government organizations and non-governmental organizations. For

example: women centres and youth centres at local and regional levels ensured the information flowed between the central government and local offices.

A culture of engagement and stakeholders participation

The active participation and engagement of both governmental and non-governmental stakeholders has been instrumental in the successful implementation of sustainable consumption and production initiatives with women and youth groups leading changes in practice. A consultative process was built within the organizational culture. The national broadcasting organizations and the local press also had a good working relationship with governmental organizations and played a crucial role in disseminating key messages and articles especially when international days such as World Environment Day were organized. Non-governmental organizations played a vital role in disseminating knowledge and information as well as promoting the adoption of sustainable consumption and production patterns. For example, the University of Mauritius played its role as a member of the Civil Society to ensure that the concept was understood among the tertiary student community.

Budget allocations and financing instruments for sustainable consumption and production

Over the last decade, the emphasis on national budgets has been focused on greening the economy to make a substantial provision for sustainable development projects. In 2010, the country had a budget entitled “Shaping Recovery Consolidating Social Progress Sustaining Green Mauritius,” which enabled the disbursement of funds in several key sectors to initiate and sustain “green” actions with the objective to enhance economic performance and kickstarting the development.

An innovative and integrated approach such as the Partnership for Green Finance brings benefits to the shift towards sustainable consumption and production in Mauritius. SUNREF, for instance, founded by Agence Française de Développement (AFD), works with local banks, which creates credit lines for financing investment enabling private sector companies and households to make investments in renewable energy, energy efficiency, pollution abatement and clean technology business.

SWITCH Africa Green

SWITCH Africa Green, a large project funded by the European Union, has been an eye-opener for many actors in Mauritius. It hassled to the development of the “Greening the economy Country Implementation Plan”, fully endorsed by the Government Cabinet as a strategic orientation for the next 10 years. The grant scheme of SWITCH Africa Green has been a real motivation, especially for the private sector to green their activities. Moreover, the networking component of the project is helping to build a further partnership at the grassroots level.

A monitoring system

Mauritius has developed its own set of sustainable consumption and production indicators, and progress is reported annually by Statistic Mauritius. The country also monitors sustainable consumption and production through the budgetary process which operates based on performance based budgeting, which means that funds are allocated as per programme / project achievement as reported by the implementing agencies.

Remaining challenges and the way forward

Mauritius has been among the African pioneers in mainstreaming sustainable consumption and production objective across its national policy framework. A lot of progress has been made at

country level, through multiple sectors and approaches, following the implementation of an initial national programme specifically dedicated to sustainable consumption and production. To go further, important challenges need to be addressed through:

- The mainstreaming of sustainable consumption and production policy recommendations into a strategic policy document across Ministries, as a requirement to obtain funds from national budgets;
- The strengthening and further development of the collaboration with private sector;
- Addressing the lack of access to green technologies and capacity building to formulate and develop adequate solutions for environmental and social challenges;
- Addressing the lack of technical expertise to conduct economic assessment to identify the economic value of the environment and implement sustainable consumption and production principles.

Seizing ongoing efforts: taking stock of existing policy instruments

In its 2009 report on Sustainable Consumption and Production in Africa, the UN Economic Commission for Africa provided several examples of activities and efforts in the region, particularly focused on sustainable production, and to a much lesser extent on sustainable consumption⁵². Production and consumption also seemed to be mainly addressed as separate issues. More advanced sustainable production concepts and instruments, such as Life Cycle Assessments, Product Service Systems or product design, adopting a system approach, were still in their infancy in the region. At that time, and traditionally, sustainable production activities were focused on cleaner production, environmental management systems (particularly ISO 14000) and on corporate management practices. Few economic instruments were in use, including financial incentives for sustainable consumption and production, pollution fees and charges. According to the UN Economic Commission for Africa, the region was heavily relying on command and control measures, or on regulation, to advance sustainable consumption and production. Hence, the report recommended that business and industry be encouraged to improve social and environmental performance through voluntary initiatives, including Environmental Management Accounting (EMA), codes of conduct, certification and public reporting on environmental and social issues, taking into account such initiatives as the UN Global Compact and the ISO and GRI guidelines on sustainability reporting. The promotion of resource efficiency and demand-side management programmes were also to be given high consideration by all African countries. Supporting the scientific and technical community through public and private sector funded research and development, but also ensuring financial and institutional sustainability of supportive institutions were among the strong recommendations of the report.

⁵² *Report of the Sixth Session of the Committee on Food Security and Sustainable Development (CFSSD-6)/ Regional Implementation Meeting (RIM) for CSD-18 Africa Review Report on Sustainable Consumption and Production*, Addis Ababa, 27 – 30 October 2009 (ECA/FSSD/CFSSD/6/16)

The sample of national sustainable consumption and production policies and initiatives collected through the 10YFP Secretariat’s global pilot survey conducted end of 2015, and to which 9 African countries had responded, reflects some evolution. In total, **36 policies and initiatives were reported, with a number of policies and initiatives per country varying from more than 10 (Sao Tome and Principe), 4 to 6 (Mauritius, Togo, Tanzania) to 1 or 2.**

While information and education instruments are extremely well anchored approaches in the sample of reported policies, regulatory instruments and legal reforms are less represented, followed by economic and financial instruments, as well as voluntary agreements.

With regards to the type of policies reported, more than half of them were **sectoral policies (58% of the whole sample)**, mainly on food and agriculture (38%), energy and climate (29%), biodiversity, water and forests (19%), tourism and waste in a more marginal way (respectively 10% and 5%). **Overarching policies – policy frameworks, strategies and action plan – represented 22% of the whole sample, while cross-cutting policies represent only 19%.**

Within the group of reported cross-cutting policies, the categories “Industry, CSR, green jobs” and “Awareness-raising, education” both counted 3 policies each, when only one reported policy was related to public procurement.

In terms of types of policy instruments reported through the pilot survey, and considering that one policy could mobilize several instruments, it appears that “Information and education” instruments were mobilized by a majority of reported policies (58%), either exclusively or through specific actions. “Policy frameworks and processes”, including strategies or action plans, represented the second most frequent type of policy instruments reported through the pilot survey (53% if them), followed by “Capacity-building and technology transfer” (42%). More than one fourth of the reported policies mobilized “Analysis and assessments” (28%), “Regulatory instruments and legal reforms” (28%), as well as “Production and value chain management” instruments (25%). Interestingly, “Economic and financial instruments”, as well as “Public/private investment schemes”, were less often identified (19% each), when “Partnerships and voluntary agreements” were almost non-existent in the sample (6% of reported policies).

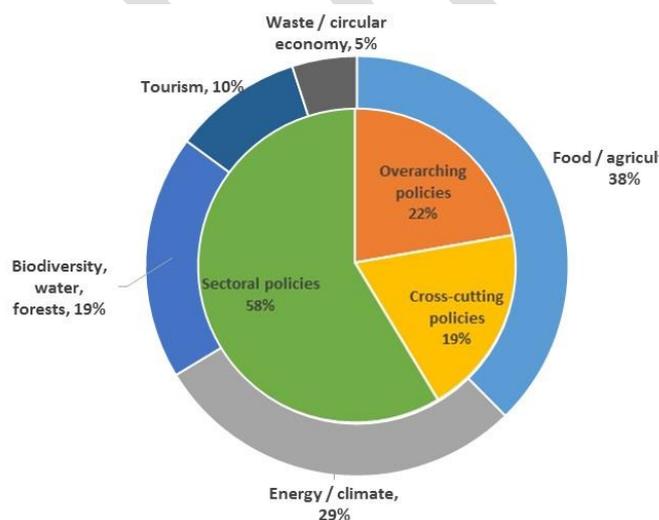


Figure 3. Distribution of Reported Policies

(outer circle: calculated based on number of sectoral policies reported)

**Source: Pilot Survey on National Sustainable Consumption and Production Policies and Initiatives 2015 (36 reported individual policies / initiatives in total for Africa)*

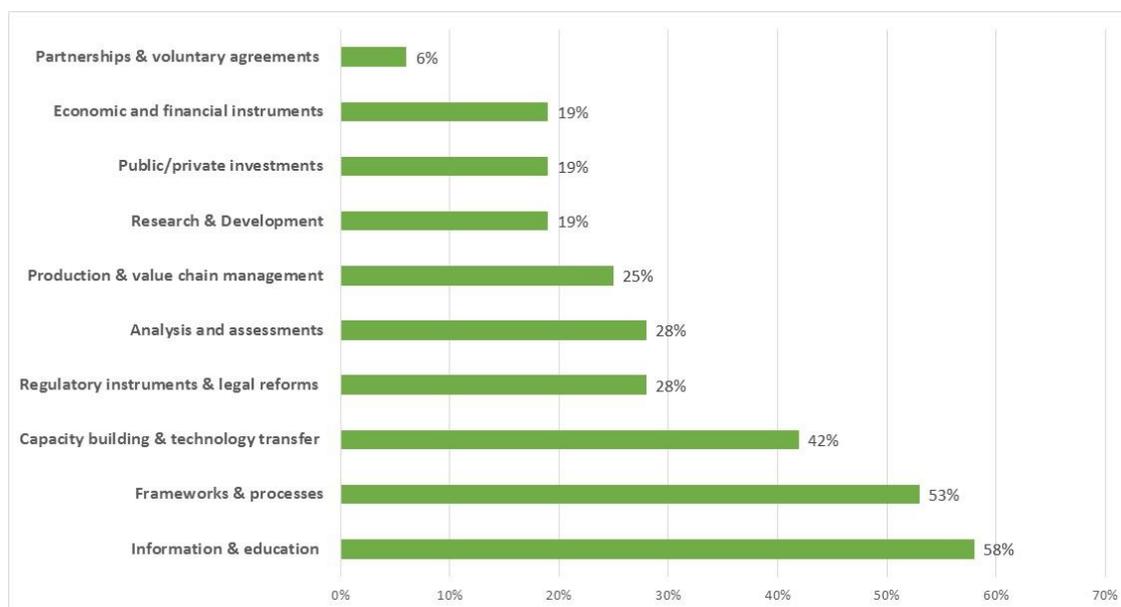


Figure 4. Types of Policy Instruments Reported

**Source: Pilot Survey on National Sustainable Consumption and Production Policies and Initiatives 2015 (36 reported individual policies / initiatives in total for Africa)*

Zambia

Promoting Sustainable Agriculture

In Zambia, agriculture generates approximately 10 % of the Gross Domestic Product (GDP) and provides livelihoods for more than 70 % of the population⁵³. The sector absorbs about 54 % of the labor force and remains the primary source of income and employment, benefiting nearly six million women and men in 2015⁵⁴.

Agricultural policy in Zambia is anchored in and supported by a development policy and a broader environmental policy framework at the national level. The **National Long-Term Vision 2030 (Vision 2030) published in 2006** articulates the country long-term development policy scenarios towards a prosperous middle income nation by 2030. Agriculture is one of the sectors highlighted in the plan to be transformed into an efficient, competitive, sustainable and export-led sector that assures food security and increased income⁵⁵. The implementation aspect of this key priority sector was strengthened by the launching of the **National Programme on**

⁵³ Ministry of Agriculture. Country presentation on Second National Agricultural Policy.

⁵⁴ International Labour Organization. Employment by Sector, 2015.

⁵⁵ Republic of Zambia. The National Long Term Vision 2030 (Vision 2030), 2006.

<http://www.oneplanetnetwork.org/resource/national-long-term-vision-2030-vision-2030-republic-zambia> s

Sustainable Consumption and Production in 2011, identifying sustainable agriculture as one of the key focus areas which need to be developed further⁵⁶.

National policies for sustainable agriculture

The National Policy on Environment, adopted in 2008, provides a holistic and cross-sectoral approach to the rehabilitation and conservation of the environment. One of the objectives is to *“to promote environmentally sound agricultural development by ensuring sustainable crop and livestock production through ecologically appropriate production and management techniques, and appropriate legal and institutional framework for sustainable environmental management”*⁵⁷. The following strategies are highlighted as key to shifting to more sustainable agricultural practices:

- Review and enact legislation to protect environmentally fragile areas from agricultural encroachment;
- Embark on intensive education, extension and mass awareness programmes and promote community participation in soil conservation measures and integrated land use systems in all parts of the country;
- Promote conservation-oriented farming practices especially in areas prone to laterization⁵⁸ and nutrient leaching;
- Introduce area-specific technologies including fertilizers, seed varieties, and soil conservation.

The Second National Agricultural Policy 2016 was developed to guide the development of the agriculture sector by providing a supporting environment that will stimulate sustainable agricultural development. The policy provides a framework that promotes sustainable agricultural diversification, commercialization, private sector participation, and inclusive agricultural growth through the promotion of *“the sustainable management and use of natural resources”*. The objective of the policy is to transform agriculture so that it becomes an efficient, competitive and sustainable sector, which assures food and nutrition security, increased employment opportunities and incomes.

The development and implementation of the Second National Agricultural Policy is based on **multi-stakeholder engagement, a mix of complementary approaches and a financing strategy**. In its efforts to foster agricultural development, the Ministry of Agriculture and the Ministry of Fisheries and Livestock take the leading role, engaging multiple partners: farming communities, suppliers, traders, agro-industry, financial institutions, and civil society organizations. At national level, the Zambia National Farmers Union⁵⁹, the Agriculture Sector Advisory Group⁶⁰ and the Agricultural Consultative Forum⁶¹ are actively involved. Partnerships have been forged

⁵⁶ Ministry of Tourism, Environment, and Natural Resources, 2011. <http://www.oneplanetnetwork.org/resource/national-programme-sustainable-consumption-and-production-zambia-2011>

⁵⁷ Ministry of Tourism, Environment, and Natural Resource. National Policy on Environment, 2009. P 35 <http://www.oneplanetnetwork.org/resource/national-policy-environment-2009-zambia>

⁵⁸ Laterization (tropical weathering) is a prolonged process of chemical weathering which produces a wide variety in the thickness, grade, chemistry and ore mineralogy of the resulting soils.

⁵⁹ Zambia National Farmers Union (ZNFU) is a national membership based organization, with countrywide coverage, representing the agriculture industry. ZNFU represent small and large scale farmers also agribusinesses. It

⁶⁰ Agriculture Sector Advisory Group lead by Ministry of Agriculture and Co-operatives to ensure the co-ordination between donors, and other stakeholder from public and private sector related to agriculture.

⁶¹ Agricultural Consultative Forum (ACF) is a Zambian Non-Governmental Organization (NGO) that provides a stakeholder platform for agricultural policy dialogue and fostering of public-private partnerships in Zambia's agricultural sector.

with Development Partners and Regional Economic Communities, such as the Southern Africa Development Community, the Food and Agriculture Organization and the World Food Programme.

The implementation of the Policy also rests on **multiple and complementary approaches**, which includes: promoting sustainable land management technologies, afforestation and agro-forestry, energy efficiency in agricultural production and processing technologies, integrated agriculture among small farmers, development of water harvesting, store, and utilization infrastructures.

With the support of UN Environment and the United Nations Development Account (UNDA), the country **supported sustainable organic agriculture** through capacity-building and outreach activities⁶². The demonstration project was selected as a result of a national consultation that engaged several stakeholders including the Ministry of Agriculture (the implementing partner), the Kasisi Agricultural Training Center, the Zambian National Farmers Union, the University of Zambia and Zambia Agricultural Research Institute. **The objective was to promote sustainable organic agriculture to improve crop yield while ensuring that environmental, economic profitability, social, and economic issues were integrated in agriculture activities.** A series of workshops was conducted for the Ministry of Agriculture and attended by technical staff representing 10 provinces. To build public awareness, sustainable organic agriculture was broadcasted on the national radio programmes and through a television documentary.

Zambia's objective with regards to sustainable agriculture is also supported by a **National Irrigational Policy 2004**, of which objective is to support "a well-regulated and profitable irrigation sector that is attractive to both private investors and Zambia's development partners". This policy is a good example of how the country can mobilize the complementary competencies of three different ministries (Ministry of Agriculture, Ministry of Water Development, Sanitation, and Environmental protection together with Zambia Environmental Management Agency) in the effort to enable a sufficient irrigation system to support sustainable agriculture.

In terms of funding, the Ministry of Agriculture and Livestock launched the **National Agricultural Investment Plan in 2013**. Followed by the High-Level Business meeting to mobilize financial and technical supports for the priority investment programmes, including financial commitments and pledges from Government, donors, and other stakeholders. Its estimated that the cost for implementing the Plan over five years (2014-2018), is USD 2.7 billion. At the current levels of planned financial support to the sector by government and other partners, there is an estimated financing gap of approximately USD 605 million⁶³.

Progress achieved and challenges

The impact created by the country's agricultural policy in the crops sub-sector includes: i) national production increased for most crops for the period 2004 to 2014, ii) the average maize yields among small scale farmers increased from 1.93 tons per hectare in 2004 to 2.36 tons per

⁶² Sustainable Organic Agriculture in Zambia. <http://www.oneplanetnetwork.org/initiative/sustainable-organic-agriculture-zambia>

⁶³ Ministry of Agriculture, 2013.

http://www.agriculture.gov.zm/index.php?option=com_content&view=article&id=127:caadp-in-zambia&catid=88&Itemid=1626

hectare in 2014⁶⁴. Moreover, the average maize (the national staple food crop) yields are significantly less than 3 metric tons per hectare despite the provision of input subsidies.

On the other hand, the performance of the agricultural sector still faces some challenges such as: **poor quality and access to connectivity and infrastructures, inadequate credit facilities, and agricultural marketing systems.** The **lack of financial resources remains one of the major constraints for most concerned agencies to enforce existing environmental laws and regulations**, even those related to the agriculture sectors: i) land degradation through inappropriate use of chemical substance in agricultural practice, ii) farm expansions, iii) inadequate land use planning, iv) insufficient dam and irrigation schemes, v) disintegration of integrated water resource management policy in agricultural policy and development.

Efforts to promote sustainable agriculture, and sustainable food systems at large, in Zambia, should continue, building on the very strong engagement of the country in this sector.

Reported policies, whether overarching, cross-cutting or sectoral, have a number of things in common, starting with their overall objectives.

Nearly one third of the policies that were analyzed clearly identify economic development and employment as their primary objectives. For instance, in **Togo**, the **Strategy for boosting growth and promoting employment**, which identifies sustainable consumption and production explicitly as its fifth axis, first and foremost aims at **ensuring an inclusive and sustainable growth, generating jobs as well as achieving poverty reduction**⁶⁵. In **Ivory Coast**, a **national policy on green jobs** was developed to **reduce unemployment among youth as well as to promote green jobs through the identification and mobilization of relevant and national mechanisms, capacity-building activities, entrepreneurship and innovation, and the mainstreaming of green skills and green jobs into the formal education system**⁶⁶. In **Sao Tome and Principe**, the **Inclusive Development of Lemba District initiative** aims at promoting the economic and social development of the District, notably through sustainable tourism and conservation. Of course, many more similar policies and initiatives, not yet reported, aim at achieving such objectives. For instance, in Madagascar nine pilot projects were elaborated in

In line with the major priorities and needs of Africa, as explained above, economic development and growth, income and jobs creation, through advancing sustainable consumption and production, remain the most frequent objectives attached to the reported policies and initiatives.

⁶⁴ Central Statistical Office, 2014. <http://zambia.opendataforafrica.org/ZMAGRISTAT2016/agriculture-statistics-of-zambia-2014>

⁶⁵ *Strategy for Boosting Growth and Promoting Employment / Strategie de Croissance Accélérée et de Promotion de l'Emploi* (SCAPE), <https://www.ilo.org/dyn/natlex/docs/ELECTRONIC/95034/111729/F-973837252/TGO-95034.pdf>, 2013 - 2017

⁶⁶ *Etude Nationale sur les Opportunités et Stratégies d'une Transition vers une Economie Verte en Côte d'Ivoire Feuille de Route*, April 2013

2015 for the promotion of green jobs, with a focus on various sectors including sustainable agriculture, waste management, sustainable tourism or fair trade⁶⁷.

Although economic development and opportunities are clearly identified as key priorities, only a few policies, among those reported and analyzed here, identify the reduction of inequalities and the promotion of equity as key objectives. In all regions, the shift to sustainable consumption and production also needs to be more often looked at from the perspective of democracy and human rights.

African being the world's second most inequitable region after Latin America, the social dimension of sustainable consumption and production policies and initiatives could be further enhanced in the future. The *National Strategy for Sustainable Development of Togo* is one of the few policies that identify, among its fundamental objectives, the strengthening of economic growth through the promotion of sustainable consumption and production patterns but also the **development of social sectors and the promotion of social equity principles**. It is also the **only reported policy which identifies peace, security and justice as key objectives**.

Sustainable consumption and production is primarily seen as a means to actively support the development of national economies, while resource efficiency and eventually the preservation of natural resources are identified as the primary objective in 25% of the reported policies, which put less emphasis on the economy. The

National Policy for the Sustainable Use of Natural Resources in Madagascar aims at ensuring the regional and equitable use of natural resources, preserving biodiversity and enabling behavioral change towards the use of natural resources⁶⁸. This naturally does not mean that the other policies do not aim at achieving resource efficiency, but that it is approached as a means to achieve economic development and growth.

Across the reported policies and initiatives, food and energy security clearly emerge as transversal priority sectors. The initiative “*Strengthening the capacities of rural communities for climate change adaptation in Sao Tome and Principe*” is a good illustration, as it aims at ensuring food security for the most vulnerable communities of the country while protecting local livelihoods from the impacts of climate change⁶⁹. Despite the importance of energy across the reported policies, and in particular within the group of sectoral policies, only a few examples, such as the one mentioned above, clearly identify climate change mitigation or adaptation as a key objective. Such an under-representation of climate change mitigation / adaptation in the sample of reported policies or initiatives does not reflect a disconnect between this objective and the issue of consumption and production patterns. Unsustainable and carbon intensive consumption and production patterns are indeed responsible, for a large part, for climate change. This under-representation may rather reflect the compartmentalization of sustainability policies, even when led by the same institutions. **Future efforts to establish a comprehensive policy baseline worldwide will need to break this silos logic to truly capture and understand**

⁶⁷ United Nations Development Programme, *Neuf projets pilotes pour la promotion de l'emploi vert a Madagascar* <http://www.mg.undp.org/content/madagascar/fr/home/presscenter/pressreleases/2015/03/03/neuf-projets-pilotes-pour-la-promotion-de-l-emploi-vert-madagascar.html>, 2015

⁶⁸ The National Environmental Action Plan (PNAE) of Madagascar Phase II and III <http://documents.worldbank.org/curated/en/970001468773368889/Madagascar-Environmental-action-plan>, 1997 – 2011, 2003 - 2008

⁶⁹ United Nations Development Programme, *Enhancing capacities of rural communities to pursue climate resilient livelihood in Sao Tome and Principe*, <http://www.adaptation-undp.org/projects/ldcf-sao-tome>, 2013

all the actions being taken to promote the shift towards sustainable (hence low carbon) consumption and production patterns, while combating climate change and its consequences.

Programmatic and planning instruments are heavily mobilized, together with capacity-building, awareness-raising and education, to achieve policy objectives. On the other hand, only a few policies reported through the pilot survey consist in **developing the physical infrastructures and equipments conducive to the adoption of sustainable consumption and production patterns.** A few initiatives, such as the **Domestic Biogas Programme in Tanzania**, illustrate the use of a good mix of policy instruments, including infrastructural development. The initiative's objective is to promote sustainable production of domestic biogas in rural areas so as to contribute to income generation, poverty alleviation and environmental conservation in Tanzania. It includes increasing the number of quality biogas plants by 12,000 in a period of five years, and ensuring the continued operation of all biogas plants installed under the programme. Together with the development and maintenance of equipments, the programme also include a marketing, capacity-building and demonstration components.

However, many large scale initiatives which clearly contribute to advancing sustainable consumption and production were not reported through the pilot survey. For instance, the **South African government built a new sustainable public transport system for the 2010 FIFA World Cup.** The project was implemented by UNDP, funded by GEF and executed by the South African Department of Transport, and aimed to produce measurable environmental benefits including an estimated 423,000 tCO₂ reduction in direct GHG emissions over a ten-year lifespan, air quality improvement and reductions in ambient noise levels (UNDESA 2008). It would be interesting to understand why such large scale projects, focused on infrastructures, have not been reported through the pilot survey on national sustainable consumption and production policies and initiatives.

Future efforts to develop a policy baseline worldwide should also focus on collecting more information on governments' action towards green financial and fiscal policies, such as **Ivory Coast's study on Green Fiscal Policy** conducted in 2016⁷⁰.

Ivory Coast

Creating enabling conditions for sustainable consumption and production through environmental fiscal policies

Ivory Coast's National Strategy for Sustainable Development⁷¹ aims at catalyzing the transition to a more sustainable society, and at establishing a regulatory and institutional framework conducive to a green economy. To finance the implementation of this strategy, the Government is planning to create an effective and integrated domestic financing framework including taxes and other financial instruments (e.g subsidies, royalties). To this end, the Ministry of

⁷⁰ Ministry of Sanitation, Environment, and Sustainable Development of Ivory Coast, *Etude diagnostique sur la fiscalité environnementale*, April 2015

⁷¹ LOI N 2014 0390 - 20 June 2014 : *D'orientation sur le développement durable*
<http://www.environnement.gouv.ci/img/142166387810oidorientationsurledd.pdf>, 2014

Environment, Urban Salubrity and Sustainable Development (Ministry of Environment) conducted a “Diagnosis Study on Environmental Taxation” in Ivory Coast from September 2014 to April 2015.

Objectives and scope

The objective of this study was to develop an inventory of existing fiscal and taxation instruments which have, directly or indirectly, an environmental dimension. It also assessed whether the existing framework could promote and support sustainable development. The results of the study included recommendations on how to strengthen and further develop the environmental taxation system of the country. Directorates and all institutions under the supervision of the Ministry of Environment and the General Directorate of Taxes participated in the project.

Existing fiscal macro-policies and commitments to encourage sustainable and resource efficient behaviors at national level were first analyzed. For instance, article 87 of the Ivorian Constitution acknowledges the country’s environmental commitments and the need to comply with international environmental conventions, which can serve as the foundation for an environmental fiscal reform. In addition, the Environmental Code (Law No. 96-766 year 1996), establishes that environmental taxes in Ivory Coast can be triggered by 1) the presence of a pollutant; 2) a product or a service which deteriorates the environment; or 3) as a levy on renewable or non-renewable resources. This law is supported by Decree No. 12-1074 the year 2012 which lays down the procedures for implementing a Pigovian tax on polluters. Taxes and royalties adopted under the “polluter pays” principle are transferred to the National Environment Fund under the Ministry of Environment.

The study analyzed more than 20 policy instruments aimed at preserving the environment: e.g total VAT exemption for private non-profit organizations working in environmental conservation; incentives based on the “polluter payer” principles such as the total exemption of VAT on the acquisition of low emissions vehicles with to reduce pollution. According to the study, the economic rationalization of natural resources (natural resources are limited and have a cost) and the double dividend approach (improving the quality of the environment by introducing or increasing an environmental tax and increasing social welfare by reducing distortions caused by the rest of the tax system) are not yet fully integrated into the existing tax system. In view of engaging an effective tax reform conducive to sustainable consumption and production patterns, and to the preservation of the environment, a series of criteria for effective environmental tax instruments have been identified.

Criteria for effective environmental tax instruments:

- Environment effectiveness: ability to achieve environmental protection objectives;
- Economic efficiency: ability to meet the financial target;
- Incentive: the instrument must incentivize polluters;
- Flexibility: the instrument must offer efficient schemes for polluters;
- Social aspect: the instrument must be well communicated to ensure its social acceptability

General Framework of an Environmental Tax Reform

According to the study, the environmental tax reform could be understood as an effort to improve the taxation system in Ivory Coast through three approaches:

- Removal of tax distortions: developing a systematic inventory and correction of the existing tax provisions which harm the environment - e.g. reviewing the subsidy scheme on land acquisition for agriculture and the tax on agriculture land by internalizing environmental impacts – land depletion factors.
- Restructuring of the existing taxes: integrating economic, fiscal, and environmental dimensions into the existing tax provisions by holistically internalizing the external costs of certain activities - e.g. to apply a different tax scheme based on the environmental impact caused such as air pollution to gradually reduce the use of most polluting fuels.
- Introduction of new environmental taxes: an introduction into national tax system with the primary objective to protect the environment - e.g. a new environmental carbon tax, by reducing employer’s contributions to social security.

The way forward

Ivory Coast’s efforts to lay the foundations of an effective and environmentally-friendly tax system illustrates the country’s very innovative approach to sustainable consumption and production, and to green economy in general. The following recommendations resulted from the in-depth analysis of the existing tax system as next steps:

- Environmental fiscal and tax instruments should be envisaged in relation to the environmental issues they are linked to: e.g. resource use, pollution, climate change.
- A general tax system on polluting activities fully based on the “polluter pays” principle, considering various sources of pollution (e.g. related to agriculture, extractive industries, and waste disposal), including a specific tax aimed at financing environmental risk management, and the development and preservation of natural parks and reserves.
- The tax expenditure mechanism to be improved by reviewing potential synergies between the National Agency for Environment and the National Environment Fund to enable access to funds to support the implementation of environment development agenda.
- A National Committee on Environmental Taxation could be set up to facilitate stakeholder consultation, the monitoring and evaluation of the environmental tax system and instruments. A dedicated platform or an annual conference could further enhance technical and knowledge capacities and collaboration among stakeholders.

Institutional Arrangements and Stakeholder Participation

In 2009, the UN Economic Commission for Africa’s report on Sustainable Consumption and Production recommended that African governments designate lead institutions to facilitate inter-sectoral cooperation in the context of sustainable consumption and production programme development and implementation at national level. A few years later, the international community adopted the 10-Year Framework of Programmes, calling all Member States to nominate national focal points for the 10YFP. Today, 31 African countries have nominated a 10YFP National Focal Points. But lead institutions cannot advance sustainable consumption and production on their own and, as highlighted in the UN Economic Commission for Africa’s report as well, **ensuring institutional sustainability, notably through specific institutional coordination mechanisms, is also a key criteria to transform sustainable consumption and production objectives into real practices.**

Among the 9 African countries that participated in the 2015 pilot survey of the 10YFP Secretariat, five declared they already had an institutional mechanism in place to coordinate action (Ivory

Coast, Mauritius, Sao Tome and Principe, Tanzania, Togo), while two countries indicated such mechanisms were under development (Cameroon, Mali). For those countries, coordination mechanisms always engaged other governmental institutions, most often academia and the business sector (in 5 cases out of 7) as well as non-governmental institutions. When looking at the extended sample of 15 countries for which it was possible to identify the actors involved in the development and/or implementation of a national relevant policy framework, stakeholders were mentioned in 80% of the cases, including governmental institutions, non-governmental organizations and private sector. **The importance of mobilizing all relevant ministries, including those that have a pivotal role with regards to the national economy, has clearly been integrated: hence, in addition to the Ministry of Environment, the Ministry of Finance, Economy or Development is almost systematically involved, followed by the Ministries of Energy, Industry, Agriculture, Infrastructures, Transports and Tourism.**

It is important to note however that the understanding of what a coordination mechanism is may vary from one country to another. Based on the detailed information provided through the pilot survey as well as on the analysis of other national policy framework documents⁷², one can see that **coordination may take several forms, even though inter-ministerial cooperation and stakeholder engagement are presented as essential to the policy development process:**

- 1. Establishing an ad hoc coordination mechanism for the development of a national policy, or other national policy framework identifying sustainable consumption and production as a development priority, appears to be the most common approach.** In a few cases, those ad hoc mechanisms, which are not necessarily meant to last in time or be institutionalized, are based on a coalition of institutions: in **Mozambique** for instance, in the context of the **Green Economy Roadmap and Action Plan**, the Ministry of Planning and development acted as coordinator, when substantial roles were given to the Ministry of Finance, Ministry of Environmental Coordination, Ministry of Foreign Affairs and Cooperation, and the National Council for Sustainable Development. It was the case also in **Uganda** for the elaboration of the **National Programme on Sustainable Consumption and Production**, for which a network of lead agencies coordinated by the National Environment Management Authority, was established.

In most cases though, ad hoc mechanisms are most often led by one entity, such as the Ministry of Environment: in **Ivory Coast**, the Ministry of Environment, Urban Sanitation and Sustainable Development took the lead in the development of the **National Green Economy Roadmap**; in **Mauritius**, the Ministry of Environment chaired the National Coordination Committee for the

Although those structures have a very clear role in the design phase of national policies, their role as such is not very clear when it comes to implementing and even less to monitoring or assessing the implementation of the policy. Individual ministries and other institutions involved in those coordination mechanisms and consultations naturally participate in implementation in their own sector or within the boundaries of their own mandate, but do they implement in a coordinated way? Do they report to a coordination mechanism? Are they using the same indicators to measure progress and success? More information on what works and what does not work at national level is needed to answer those questions and to provide further guidance and recommendations on how to support an integrated approach on the ground.

⁷² Including 15 countries (see p.25)

implementation of the **National Programme on Sustainable Consumption and Production**; in South Africa, the Ministry of Water and Environmental Affairs, through the Department of Environmental Affairs, established a National Committee to support the development of the **National Strategy for Sustainable Development and Action Plan 2011-2014**. In Uganda, the National Environment Management Authority coordinated the Policy Committee on the Environment, comprised of eleven ministries, under the chairmanship of the Prime Minister, to lead the development of the **National Programme on Sustainable Consumption and Production**. **The leading role is sometimes taken by higher instances**, such as the Prime Minister in Ethiopia for the **Climate-Resilient Green Economy Strategy**, in Mauritius for the “**Maurice Ile Durable**” framework, or the Vice President Office in Tanzania for the development of the **national 10-year programme on sustainable consumption and production**. Leading institutions are generally in charge of steering and coordinating the policy development process, either through **ad hoc inter-ministerial and, in some cases, multi-stakeholder, committees, or through a more centralised approach**. For instance, in Zambia, the process of developing the **national sustainable consumption and production programme** started with the establishment of a Steering Committee and a Technical Working Group, whose members comprised stakeholders from government ministries and agencies, the private sector, the media, research and learning institutions as well as civil society organizations. Recognizing that the Environmental Council of Zambia is mandated to enforce environmental legislations, including the Environmental Protection and Pollution Control Act, and monitor pollution and natural resources degradation, the Environmental Council assumed the coordinating and secretariat role of the Technical Working Group.

- 2. A few countries, among those considered in this report, have established more complex structures to oversee the development and implementation of sustainable consumption and production instruments or other related national policies.** In Ethiopia, a specific mechanism was put in place for the development of the **Climate-resilient Green Economy Strategy**, including an inter-ministerial steering group – the Ministerial Steering Committee – composed of State Ministers and senior officials from the participating institutions, and of seven sub-committees engaging more than 50 expert from 20 leading governmental institutions. The overall responsibility and oversight lies with Ethiopia’s Environmental Council, chaired by the Prime Minister, which includes members of the Federal ministries, Presidents of National Regional States, and representatives of non-governmental bodies, the private sector and trade unions. The Climate-Resilient Green Economy Strategy of Ethiopia also plans for the establishment of a permanent set up to coordinate its implementation and monitoring, under the co-responsibility of the Environment Protection Agency, accountable to Ethiopia’s Environmental Council, and of the Ministry of Finance and Economic Development. While the Environment Protection Agency is expected to supervise and regulate the implementation of the technical components of the strategy, with a team of experts working on each economic sector to monitor projects in close cooperation with all relevant ministries, the Ministry of Finance and Economic Development is expected to solicit financial support from international sources and channel the available funds in the form of advance support or ex-post payment. This co-responsibility and strong engagement of the Ministry of Finance is not a common setting, although it does reflect the willingness to invest in the shift to a green economy as an opportunity. Ethiopia’s return on experience with regards to this institutional setup would be certainly extremely valuable to other countries looking for the most efficient coordination mechanism at national level to ensure

an integrated approach. Similarly, in **Tunisia**, in the context of the SWITCH Med programme, the governance structure established to support the development and implementation of the **National Action Plan on Sustainable Consumption and Production** (agriculture and tourism)⁷³ includes a steering and decision-making body, gathering several actors, a national coordinator within the Ministry of Environment and Sustainable Development, several task forces established within the relevant ministries including the Ministry of Tourism, the Ministry of Environment and Sustainable Development and the Ministry of Agriculture, additional thematic groups and a monitoring entity. Finally, only in a minority of cases, does the National Commission for Sustainable Development serve as the coordination body for national sustainable development strategies.

The analysis of the 36 individual cross-cutting or sectoral policies reported through the pilot survey also shows that inter-ministerial and stakeholder participation have become key guiding principles. **The relatively low level of engagement of the private sector should be highlighted and addressed in the future, in particular when policies aim at transforming practices along the value chain or stimulating the creation of green jobs.**

Funding and Technical Resources

Through the 2015 pilot survey, only eight countries identified a mix of funding and technical resources associated with sustainable consumption and production policy making in general, including “domestic investments / budget” for seven of them, “International cooperation / investment” for six of them and “Public – private partnerships” for only three of them. This trends is confirmed by the analysis of the individual policies reported through the pilot survey, although this information was not provided in many cases: for more than half of the policies for which this information is available, the national budget is identified as one, although not the only, funding source, and is followed by bilateral or international cooperation. A few UN entities are mentioned for a number of reported policies, including the **United Nations Development Programme (UNDP)**, the **Global Environment Fund (GEF)** and **UN Environment**, in particular through the SWITCH Africa Green programme.

A number of multilateral and bilateral cooperation agencies are also referred to, although no specific funding pattern seems to emerge: the **development and cooperation agencies of France, Denmark, Germany, Japan and Sweden**, as well as **global and regional development banks such as the World Bank, the African Development Bank (ADB), the Arab Bank for Economic Development in Africa (BADEA) and the KfW Development Bank**. Regional African institutions, at the exception of the **Economic Community of Western African States**, are not mentioned, at least in the survey results. On the other hand, the **European Union**, in addition to the references to SWITCH Africa Green, is mentioned several times.

⁷³ Ministère de l’Environnement et du Développement Durable Tunisie, Etats des lieux sur les modes de production et de consommation durables (<https://www.switchmed.eu/fr/documents/etat-des-lieux-mpcd-tunisie.pdf>), 2016

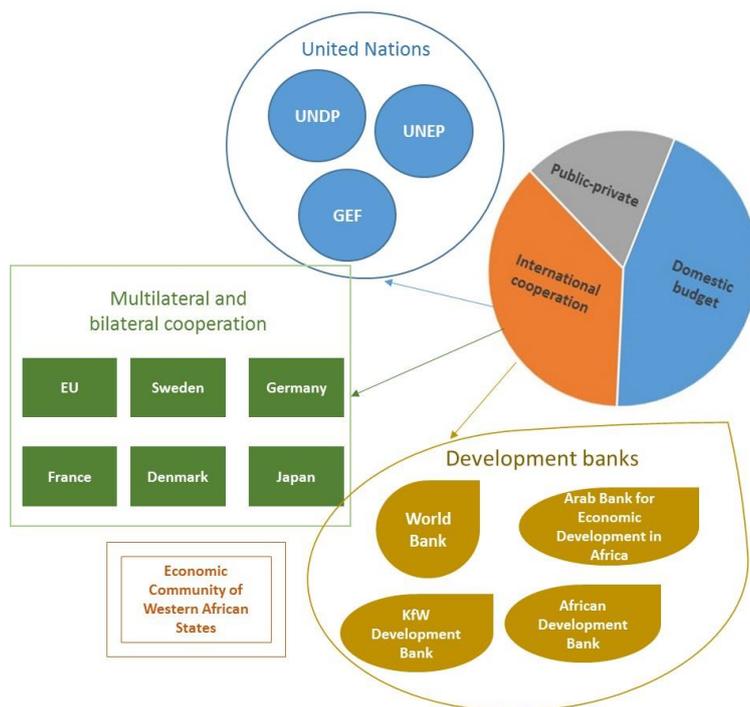


Figure 5. Funding sources mentioned in the pilot survey on national sustainable consumption and production policies and initiatives, 2015

This information should be further completed in the future to better understand the financial flows which can support policy design and implementation for sustainable consumption and production. Such efforts should also explore innovative funding schemes and mechanisms, including those involving the use of financial instruments or of the private sector. Some examples exist in Africa, which could be looked at, such as the special fund created by the Minister of Finance in his 2008-2009 budget (the “Maurice Ile Durable” Fund) to support renewable energy, energy efficiency and waste recycling through taxes, government subsidies, development partners, carbon credits and the private sector, including airlines offsetting their carbon footprints.

Monitoring and Indicators for sustainable consumption and production

The adoption of the Sustainable Development Goals and targets, including one stand-alone goal on Sustainable Consumption and Production as well as many relevant targets under other goals, has put emphasis on the necessity to monitor and measure progress at country level as well as internationally. The objective is to better understand where the world stands with regards to sustainability and make more strategic choices in the future. However, **monitoring progress and measuring environmental, social and economic impacts remains a challenge that is still to be addressed.**

For nearly half of the 36 African policies and initiatives collected through the 2015 10YFP Secretariat's pilot survey, no progress or impact indicator were reported, and results were reported for less than one third. **Output based indicators – such as number of tools or resource materials produced, number of action plans, training sessions, etc. – are more frequently used to measure progress in implementation. Impact indicators are identified for a minority of policies and initiatives, mixing economic, social and environmental indicators in a very few cases only.** For instance the **Domestic Biogas Programme in Tanzania** used various complementary indicators to measure impacts, including environmental ones (e.g. amount of greenhouse gas emissions reduced; area of forest saved from deforestation (ha)), as well as socio-economic ones (e.g. workload reduction, particularly for women and children; amount of direct employment opportunities created; amount of reduced exposure to indoor air pollution). This initiative is one of the rare reported ones that also identified clear targets. Another example is the **Long Term Energy Strategy and Action Plan of Mauritius**, which aims at bringing the country to reach, within 50 years, a level of about 70% self-sufficiency in terms of energy supply, as well as to reduce its greenhouse gas emissions by 70%. When results are reported, they are also quantified in a minority of cases (9 policies/initiatives out of 36). Reporting frameworks are also mentioned in only a few instances, mainly the Millennium Development Goals and UNFCCC for GHG reductions.

Monitoring and measurement methodologies, including the definition of indicators, should be integrated to the policy design process at very initial stages, while comprehensive data sources are being used and further developed. Policy results should also be shared, preserved and aggregated in order for the knowledge base, both scientific and empirical, to grow and provide clear guidance on what works at scale, what does not and why.

Tanzania

Sustainable production of domestic biogas: creating employment opportunities and preserving the environment

In Tanzania, over 80% of the total energy consumption is used in rural areas. It is also estimated that about **94% of the country's energy requirements is met by biomass**, primarily wood fuel. Furthermore, **poor households spend up to 35% of their income on domestic energy**. This high dependence on wood fuel significantly contributes to deforestation, soil degradation and indoor household pollutions. The **Domestic Biogas Programme in Tanzania offers a good illustration of how several policy instruments (policy mix) can be mobilized in a complementary manner to achieve greater impacts.** In this case, the initiative aimed at promoting the sustainable production of domestic biogas in rural areas through multiple actions, including the development of biogas infrastructures - increasing the number of quantity biogas plants by 12,000 in a period of five years, and ensuring the continued operation of all biogas plants installed under the programme, including through marketing, capacity-building and demonstration component. Through this programme, Tanzania has been promoting sustainable production of domestic biogas in rural areas to enable income generation, eradicate poverty

and to conserve the environment, demonstrating results which can inspire the whole region and beyond.

Context and objectives

Tanzania is one of the few African countries that started investing in biogas as early as in the 1980s. Despite its initial efforts to create a biogas center of excellence, through the Center for Agricultural Mechanization and Rural Technology, a government parastatal and research organization, the country struggled to upscale the use of this technology. Several barriers needed to be overcome, including: sparse production figures, limited availability of skilled human resources in rural areas as well as limited investments.

In 2008, Tanzania joined the **Africa Biogas Partnership Programme**, a joint venture led by the Netherlands' Directorate-General of Development Cooperation, the Netherlands' Development Organisation and the Humanist Institute for Development Cooperation (Hivos). One year later, **Tanzania Domestic Biogas Programme** agreement was signed, hosted by the Center for Agricultural Mechanization and Rural Technology. The objectives of this agreement was to:

- Improve the livelihoods and quality of life of rural farmers in Tanzania by developing a commercially viable domestic biogas market, and by increasing the quality and quantity of biogas plants;
- Explore non-market benefits of domestic biogas, particularly bio-slurry as bio-fertilizer for agricultural purposes;
- Continuously strengthen the institutional capacity needed to ensure the sustainable development of the biogas sector.

Institutional framework and resources mobilized

The **National Biogas Steering Committee** was established under the Ministry of Energy and Minerals to oversee the implementation of the Tanzania Domestic Biogas Programme. Resources were successfully mobilized from multiple sources to help Tanzania achieve its objectives. The Government raised **USD 1.6 million**⁷⁴ from the Norwegian Government through the Rural Energy Agency under the Ministry of Energy and Minerals. This complemented funds received from the Africa Biogas Partnership Programme, which contributed more than **USD 3 million** to the programme during the same period. In addition, the Rural Energy Fund and Carbon Credit Gold Standard mechanism provided alternative financing sources, through a **subsidy and grant scheme** targeted at Biogas Constructions Enterprises, in the area of energy services and infrastructure development, facilitated by Hivos and partnering with Climate Neutral Group.

The Center for Agricultural Mechanisation and Rural Technology as the implementing agency also built partnerships with local institutions, such as: the Vocational and Educational Training Authority, the Small Industries Development Organisation, Savings and Credit Cooperatives Union League Tanzania and an NGO called "Miradi ya Gesi ya Samadi Dodoma"⁷⁵. They contributed to the strengthening of capacities and technology transfer through: advisory services, trainings, sharing of best practices, guidelines and toolkits targeted but not limited to Biogas Constructions Enterprises.

⁷⁴ 10,000 biogas plants to be installed with support from the Government and Norwegian Embassy, 2016

<http://www.snv.org/update/10000-biogas-plants-be-installed-tanzania-support-government-norwegian-embassy>

⁷⁵ Miradi ya Gesi ya Samadi Dodoma (MIGESADO) is an organization which is involved in setting up and building biogas systems

Well measured impact at several levels⁷⁶:

Since it was established 2009, the Tanzania Domestic Biogas Programme achieved significant results in the area of biogas market development, environmental conservation and health, poverty eradication and income generation:

Biogas market creation

- **Over 12,000 domestic biogas plants** were constructed in **22 regions of the Tanzania Mainland, benefited 80,500 direct beneficiaries;**
- The entrepreneurial capacity of Biogas Constructions Enterprises to provide energy services was reinforced.

Environment conservation and health

- **Reduction of about 218,600 tCO₂eq of greenhouse gas emissions;**
- Avoided deforestation; **62,000 ton of wood saved;**
- Number of patients with respiratory and eye illness caused by households indoor smoke reduced; **13,500 smoke-free kitchens installed;**
- Improved sanitation and hygiene around the cowsheds and toilet; **2,400 digester toilets installed;**
- Improved agricultural yields as the impact of bio-slurry utilisation as a compost; **6,500 productive slurry users;**
- Increased awareness and adoption of domestic biogas plants.

Poverty eradication and income generation

- **Created rural direct employment** through the programme partnership with **47 private enterprises**

The Way Forward

The potential for sustainable consumption and production to become a key element in the economic and social development of Africa is broadly recognized. This has already translated into the development of a number of national policies and instruments either specifically dedicated to sustainable consumption and production or supportive to the shift. However, implementation at scale remains a challenge, in Africa as in other regions. The nice African countries that participated in the 10YFP Secretariat's pilot survey in 2015 identified the **lack of technical and institutional capacity, as well as the lack of funding and investments as the most important barriers**. Three countries also identified the lack of legislative framework as an important obstacle: legal frameworks do not always provide the right incentives, for instance insufficient environmentally-friendly fiscal policies, and/or are not enforced at the right level. **The lack of information and experience sharing on costs and benefits, including through demonstration projects**, was also seen as a barrier to an accelerated shift towards sustainable consumption and production practices.

⁷⁶ Source: Global survey on National Sustainable Consumption and Production Policies and Initiatives Tanzania 2015, Programme Implementation Document – Tanzania Domestic Biogas Programme, 2009. http://area-net.org/wp-content/uploads/2016/01/Tanzania_Biogas_Programme.pdf

The following capacity areas were highlighted, in order of importance, as the most needed at national level to help overcome those barriers:

- **Policy design and strengthening.** Countries that did not have a national action plan on sustainable consumption and production highlighted the importance of developing one as a next step. Others mentioned the need to further mainstream sustainable consumption and production objectives into sectoral policies. Government budgetary allocations for sustainable consumption and production were mentioned as an important step.
- **Institutional capacities for management, implementation and monitoring:** nearly half of the survey respondents highlighted the need to not only develop but implement policy frameworks as a next step, while mobilizing technical support and capacity-building, notably for the business sector. The role of the 10YFP could play in supporting institutional strengthening and coordination at national level, working in close collaboration with national focal points, was also stressed, together with the implementation of pilot projects to demonstrate financial and socio-economic benefits.
- **Knowledge transfer, learning and information sharing, and communications and awareness-raising:** although those areas were less often mentioned as areas for which more capacities were needed, they were seen as key to the next step by a majority.
- **Scientific and technical capacities, measurement and indicators** (for more than 1/3 of the respondents).

Based on the observations made in this report and insights received from the countries that participated in the 10YFP Secretariat pilot survey in 2015, the following recommendations should be considered:

6. Initiate or continue the development of the institutional capacities and human resources needed to mainstream sustainable consumption and production objectives

Any integrated approach to sustainable consumption and production at country level requires public actors, including ministries, legislative bodies and national administrations, to agree on the objectives they can deliver collectively, while building on the specificity and strengths of individual mandates. This requires political leadership, a vision to seize the opportunities that investing in sustainable consumption and production offers. It also requires institutional capacities and resources that can help break silos and organize collective action, across sectors, including with regards to budgeting processes. The objective is to create a “culture of sustainable consumption and production”, through skills development, across the government, including its economic and financial components. The development of national strategies and/or action plans, through inclusive and consultative processes, can also serve as an initial step towards the mainstreaming of sustainable consumption and production objectives into the policy framework.

7. Encourage investments and business innovations for sustainable consumption and production models

Investing in sustainable consumption and production can become a competitive advantage on the international economic scene, as well as a driver for innovation in key development sectors, such as housing, energy or agriculture. Domestic and foreign investments should be encouraged, and the shift to sustainable consumption and production models also considered as a strategic objective while countries continue to work on regulatory reforms that can facilitate business development. The business sector, and in particular Small and Medium Size Enterprises have a

key role to play, especially when policies aim at transforming practices along the value chain, delivering sustainable products and services, and stimulating the creation of green jobs. Public-private partnerships are still to be developed at scale to support the sustainable development of basic infrastructures and innovation.

8. Realize the economic and the social potential of sustainable consumption and production

Promoting sustainable consumption and production is recognized as a source of opportunities in terms of economic development models: economic diversification, through industrial development and sustainable products, or through emerging sectors such as tourism, entrepreneurship, green and decent jobs, food and energy security, innovation and technology transfer, inclusive governance for a better share of benefits across society. However, social benefits of sustainable consumption and production, such as the reduction of inequalities or the promotion of equity, are still largely overlooked. In Africa, as in other regions, the shift to sustainable consumption and production also needs to be more often approached from a human rights perspective.

9. Strengthen stakeholders' engagement and cooperation, at national and regional level

The objective is to further develop inclusive cooperation platforms, at both national and regional levels, that can support each country in its efforts to accelerate the shift towards sustainable consumption and production. Such platforms play an essential role in facilitating access to technical support, for instance on issues such as indicators and measures of progress. They also provide countries with opportunities to share experience and lessons learned, identifying successful solutions and good practices. The adoption of Agenda 2030 and the Sustainable Development Goals offers a great opportunity for Africa to revise its regional roadmap for sustainable consumption and production, and the modalities of its implementation.

10. Encourage more African countries to monitor and report on progress

The participation of more African countries in reporting exercises focused on national sustainable consumption and production policies and their impacts should be actively encouraged. This is key to better understand the status of those policies and the best strategic options available to countries, considering environmental and socio-economic objectives. Such reporting efforts should also build on inter-ministerial cooperation and integrate the fundamental interlinkages that exist between sustainable consumption and production and other major challenges such as climate change. Future efforts should also focus on collecting more information on the costs and benefits of the policies and instruments that are being experimented, especially legal and economic instruments likely to change the rules of the games. More information on what works and what does not work at national level is needed to provide further guidance and recommendations on how to support an integrated approach on the ground.

Index

Country

Algeria	pp. 28,29,31
Burkina Faso	pp. 21,23,24,26,28,32,35,36
Cameroon	pp. 22,23,24,25,26,28,31
Côte d'Ivoire (Ivory Coast)	pp. 9,23,24,25,26,28,29,32,34,47,49,50,51,52
Democratic Republic of Congo	pp. 14
Egypt	pp. 14,21,23,24,26,28,32,34,35
Ethiopia	pp. 15,22,24,25,28,29,30,33,35,36,53
Gabon	pp. 23,24,25,26,29,32,34,35,36
Ghana	pp. 14,21,23,24,26,28,31
Kenya	pp. 11,14,15,21,23,24,26,29,32,34,36
Libya	pp. 14,22,25
Madagascar	pp. 13,22,23,24,25,26,28,29,30,31,47,48
Mali	pp. 22,23,24,25,26,28,31,33,52
Mauritius	pp. 9,21,22,23,24,25,26,28,29,32,33,34,35,36,37,38,39,40,41,43,52,53,56
Morocco	pp. 21,22
Mozambique	pp. 14,21,23,24,25,26,29,32,34,35,36,52
Nigeria	pp. 13,14,16
Rwanda	pp. 14,23,24,26,28,29,32,34,35
Sao Tome and Principe	pp. 22,23,24,26,43,47,48,52
South Africa	pp. 14,21,23,24,25,26,29,30,31,32,35,49,53
Seychelles	pp. 13
Tanzania	pp. 9,11,14,15,22,23,24,26,28,29,32,33,35,43,49,52,53,56,57,58
Togo	pp. 22,23,24,26,28,29,32,43,47,48,52
Tunisia	pp. 14,21,22,23,24,25,26,28,29,32,36
Uganda	pp. 11,15,21,23,24,26,28,29,32,35,52,53
Zambia	pp. 9,14,23,24,25,27,28,29,32,34,44,45,46,47,53
Zimbabwe	pp. 21,25

Agriculture and fishery		
<i>Agriculture</i>	pp.	10,11,13,15,18,21,28,31,32,33,37,38,39,43,44,45,46,47,48,49,51,52,54,59
<i>Fisheries Master Plan</i>	pp.	33
<i>Sustainable Agriculture</i>	pp.	13,44,45,46,47,48
Buildings and construction	pp.	31,33
Consumer goods	pp.	11,15
Financial sector		
<i>Green finance</i>	pp.	31,41
<i>Funding sources</i>	pp.	55
Education	pp.	8,10,19,20,32,38,43,45,47,49,57
Sustainable lifestyles and education	pp.	31,38
Energy	pp.	10,11,13,16,18,20,31,32,33,34,37,38,39,40,41,43,46,48,49,53,52,55,56,57,58,59,60
Energy security	pp.	11,34,48,60
Renewable energy	pp.	13,31,38,39,41,55
Energy efficiency	pp.	33,38,39,41,46,55
Sustainable energy	pp.	20
Energy services	pp.	57,58
Food & Beverage		
Sustainable food systems	pp.	31,47
Food security	pp.	8,13,16,17,19,28,33,42,44,48
Environmental services	pp.	
<i>Environmental impact</i>	pp.	11,17,51
<i>Environmental management</i>	pp.	42,46
<i>accounting</i>		
<i>Environmental protection</i>	pp.	19,33,39,46,50,53
<i>Environmental degradation</i>	pp.	8,17
<i>Environmental indicators</i>	pp.	56
Government and Civil Society	pp.	9,19,21,30,35,36,37,38,39,40,41,45,46,49,51,52,53,55,57,59
Housing	pp.	11,14,33,59
Industrial sector	pp.	28
Tourism	pp.	8,10,11,18,21,31,32,33,37,38,39,40,43,45,47,48,52,54,60
Waste	pp.	10,18,19,20,21,28,31,38,39,43,48,51,55
Integrated solid waste (including E-waste)	pp.	19
Waste management	pp.	28,31
Waste recycling	pp.	55
Water	pp.	10,16,19,20,31,32,37,38,39,40,43,46,47,53

References

- African Development Bank. (2012). Income inequality in Africa. Retrieved from: <https://www.afdb.org/fileadmin/uploads/afdb/Documents/Policy-Documents/FINAL%20Briefing%20Note%205%20Income%20Inequality%20in%20Africa.pdf>
- African Regional Roadmap for the 10-YFP on Sustainable Consumption and Production. (2014). Retrieved from <http://www.scpclearinghouse.org/sites/default/files/10yfp-africa-regionalroadmap.pdf>
- Global Footprint Network. (2016). Public Data Package. Retrieved from: http://www.footprintnetwork.org/en/index.php/GFN/page/public_data_package
- Intergovernmental Panel on Climate Change. (2013). *Climate Change 2013: The Physical Science Basis - Fifth Assessment Report*. Retrieved from <https://www.ipcc.ch/report/ar5/wg1/>
- International Energy Agency. (2016). *Key world energy statistics*. Retrieved from <https://www.iea.org/publications/freepublications/publication/key-world-energy-statistics.html>
- International Institute for Sustainable Development (IISD). (2011). The Africa regional preparatory conference for the United Nations Conference on Sustainable Development (Rio+20) Addis Ababa, Ethiopia [paragraph 26]. Retrieved from <http://enb.iisd.org/vol27/enb2741e.html>
- International Monetary Fund. (2016). *World Economic Outlook: Too Slow for Too Long*. Washington, April.
- Jeffrey, K., Wheatley, H., & Abdallah, S. (2016). *The Happy Planet Index: 2016. A global index of sustainable well-being*. London. Retrieved from: <http://happyplanetindex.org/resources/>
- Juha Leppänen, Alekski Neuvonen, Maria Ritola, Inka Ahola, Sini Hirvonen, Mika Hyötyläinen, ... Roope Mokka. (2015). *Future Scenarios for New European Social Models with Visualisations Scenarios for Sustainable Lifestyles 2050: From Global Champions to Local Loops*. Retrieved from: http://www.sustainable-lifestyles.eu/fileadmin/images/content/D4.1_FourFutureScenarios.pdf
- Lettenmeier, M., Liedtke, C., & Rohn, H. (2014). Eight Tons of Material Footprint - Suggestion for a Resource Cap for Household Consumption in Finland. *Resources*, 3, 488–515. Retrieved from <http://doi.org/10.3390/resources3030488>
- Madagascar's policy on green exports. Retrieved from <http://www.commerce.gov.mg/2016/11/07/examen-national-de-lexport-vert-enev-a-madagascar/>
- Material productivity by world region, 1980-2013. (2015). Retrieved from <http://www.materialflows.net/trends/analyses-1980-2013/material-productivity-by-world-region-1980-2013/>
- Mckinsey Global Institute (2016), Mckinsey Global Institute African Stability Index
- Ministere Du Commerce et De La Consommation, *Examen National de l'Export Vert (ENEV) of Madagascar*. Retrieved from: <http://www.commerce.gov.mg/2016/11/07/examen-national-de-lexport-vert-enev-a-madagascar/>

- Norwegian University of Science and Technology and Center for International Climate and Environment Research. (2013). Carbon Footprint of Nations – Data Visualizations Carbon (1990-2010). Retrieved from [http://carbonfootprintofnations.com/content/carbon_footprint_worldwide_1990_2010_ /](http://carbonfootprintofnations.com/content/carbon_footprint_worldwide_1990_2010/)
- Schandl, H., Fischer-Kowalski, M., West, J., Giljum, S., Dittrich, M., Eisenmenger, N., Fishman, T. (2015). Material Footprint, Material Intensity, Material Productivity.
- The Conference Board. (2016). Total Economy Database - *Output, Labor, and Labor Productivity, 1950-2016*. Retrieved from <https://www.conference-board.org/data/economydatabase/index.cfm?id=27762>
- The Water Project. (2016). Facts about water: statistics of the water crisis. Retrieved from https://thewaterproject.org/water-scarcity/water_stats
- The World Bank. (2013). Africa Development Indicators 2012/13. Washington, DC. Retrieved from <https://openknowledge.worldbank.org/bitstream/handle/10986/13504/9780821396162.pdf?sequence=1>
- The World Bank Group. (2016a). The World Bank - DataBank. Retrieved from <http://databank.worldbank.org/data/>
- The World Bank. (2016b). Understanding poverty. Retrieved from <http://www.worldbank.org/en/topic/poverty/overview>
- United Nations. (2016a). Member States. Retrieved September 28, 2016, from <http://www.un.org/en/member-states/>
- United Nations. (2016b). Non-member States. Retrieved September 28, 2016, from <http://www.un.org/en/sections/member-states/non-member-states/index.html>
- United Nations Economic Commission for Africa. (2009). Africa Review Report on Sustainable Consumption and Production, Retrieved from: <http://www1.uneca.org/Portals/3/documents/AfricanReviewReport-on-SustainableConsumption.pdf>
- United Nations Department of Economic and Social Affairs. (2008). Report of the Secretary-General. Commission on Sustainable Development. Sixteenth Session.5-16 May 2008. United Nations. New York.
- United Nations Department of Economic and Social Affairs, Population Division. (2015). World Population Prospects: The 2015 Revision, Key Findings and Advance Tables. Working Paper No. ESA/P/WP.241. New York. Retrieved May 26, 2016, from https://esa.un.org/unpd/wpp/publications/files/key_findings_wpp_2015.pdf
- United Nations Development Programme. (2016). Human Development Reports - Human Development Data (1980-2015). Retrieved September 28, 2016, from <http://hdr.undp.org/en/data>
- United Nations Economic Commission for Africa. (2016). Macroeconomic policy and structural transformation of African economies. Addis Ababa, Ethiopia. Retrieved from <http://repository.uneca.org/bitstream/handle/10855/22980/b11560095.pdf?sequence=2>

- United Nations Environment Programme (2016a). Global Material Flows and Resource Productivity. *An Assessment Study of the United Nations Environment Programme International Resource Panel*. Retrieved from http://unep.org/documents/irp/16-00271_LW_GlobalMaterialFlowsUNE_SUMMARY_FINAL_160701.pdf
- United Nations Environmental Programme. (2016b). National Focal points – 10YFP. Retrieved from http://www.unep.org/10yfp/Portals/50150/NFP_Directory/NFP_directory_for_public_120716.pdf
- United Nations Environment Programme. (2016c). The Marakech process. Retrieved from <http://www.unep.org/10yfp/about/what-10yfp/marrakech-process>
- United Nations Environment Programme. (2016d). UNEPLive - Inclusive Wealth Index. Retrieved from: <http://uneplive.org/InclusiveWealth>
- United Nations Environment Programme (2016), Global Material Flows and Resource Productivity. *An Assessment Study of the United Nations Environment Programme International Resource Panel*. Retrieved from http://unep.org/documents/irp/16-00271_LW_GlobalMaterialFlowsUNE_SUMMARY_FINAL_160701.pdf
- UN/ODI/Ipsos MORI (2016), The United Nations Global Survey for a Better World , database, United Nations, the Overseas Development Institute, Ipsos MORI and partners. Retrieved from: <http://dx.doi.org/10.1787/888933350406>
- World Economic Forum on Africa. (2016). What is the future of Africa. Retrieved from <https://www.weforum.org/agenda/2016/05/what-s-the-future-of-economic-growth-in-africa>
- Worldometers. (2017). Africa population (Live). Retrieved from <http://www.worldometers.info/world-population/africa-population/>
- World Health Organisation/ United Nations Children's Fund. (2015). Joint Monitoring Programme for Water Supply and Sanitation. Retrieved from http://www.wssinfo.org/fileadmin/user_upload/resources/JMP-Update-report-2015_English.pdf