



Report on sustainable development goals for the Eastern Africa subregion

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Acronyms

ACI	Africa Capacity Indicators
AfDB	Africa Development Bank
ACIR	Africa Capacity Indicators Report
AIDS	Acquired Immunodeficiency Syndrome
ARV	Antiretroviral drugs
AU	African Union
AUC	African Union Commission
CAADP	Comprehensive Africa Agriculture Development Programme
CAP	Common Agricultural Policy
CCS	Climate Change Scenario
CEDAW	Convention on the Elimination of All Forms of Discrimination against Women
CGAP	Consultative Group to Assist the Poor
COMESA	Common Market for Eastern and Southern Africa
CPIA	Country Policy and Institutional Assessment
CSIR	Council for Scientific and Industrial Research
DFID	Department for International Development
DRC	Democratic Republic of the Congo
EAC	East African Community
ECA	United Nations Economic Commission for Africa
ECGLC	Economic Community of the Great Lakes Countries
EU	European Union
FAFS	Framework for African Food Security
FAO	Food and Agriculture Organization
FARA	Forum for Agricultural Research in Africa
GATT	General Agreement on Tariffs and Trade
GDP	Gross Domestic Product
GNP	Gross National Product

GHG	Green House Gas
GHI	Global Hunger Index
GPAFS	Global Partnership for Agriculture and Food Security
HD	Human Development
HDI	Human Development Index
HIV	Human Immunodeficiency Virus
IAASTD	International Assessment of Agricultural Science and Technology for Development
ICT	Information and Communication Technology
IFAD	International Fund for Agricultural Development
IFPRI	International Food Policy Research Institute
IGAD	Intergovernmental Authority on Development
IMF	International Monetary Fund
IPCC	Intergovernmental Panel on Climate Change
LDCs	Least Developed Countries
JPoI	Johannesburg Plan of Implementation
MDGs	Millennium Development Goals
MEAs	Multilateral Environment Agreements
NEPAD	New Partnership for Africa's Development
ODA	Official Development Assistance
PPP	Purchasing Power Parity
PRSP	Poverty Reduction Strategy Papers
R&D	Research and Development
REC	Regional Economic Community
RIM	Regional Implementation Meeting
SAPs	Structural Adjustment Programmes
SD	Sustainable Development
SDGs	Sustainable Development Goals

UN	United Nations
UNCDF	United Nations Capital Development Fund
UNCSD	United Nations Conference on Sustainable Development
UNDP	United Nations Development Programme
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNEP	United Nations Environment Programme
UNGA	United Nations General Assembly
UNICEF	United Nations Children’s Fund
UNISDR	United Nations International Strategy for Disaster Reduction
WCED	World Commission on Environment and Development
WSSD	World Summit on Sustainable Development

Executive summary

The present report on sustainable development goals (SDGs) for the Eastern Africa subregion is one of five subregional reports prepared within the framework of the Africa Post-2015 and Rio+20 follow-up consultative processes. The subregional reports, together with the Africa regional report, are intended to inform the engagement of African countries in the global SDGs process with a view to ensuring that the goals agreed upon are in line with the region's sustainable development priorities. All the reports were presented at the Africa Regional Consultative Meeting on the SDGs, jointly organized by Economic Commission for Africa (ECA), the African Union Commission (AUC) and the African Development Bank (AfDB), from 31 October to 5 November 2013. The meeting adopted its outcome document as a technical input for consideration by the Africa High-level Committee on the Post-2015 Development Agenda.

The Eastern Africa subregion comprises 14 countries, located either in the Great Lakes region, the Horn of Africa or the Indian Ocean islands. These countries face similar economic, social and environmental challenges and share a common concern about the likelihood of not achieving all the targets set for the Millennium Development Goals.

However, in the last six years, the subregion has experienced impressive economic growth, despite the global financial crisis. The subregion's average GDP growth rate in the period 2010-2013 was about 5 per cent, Ethiopia being the fastest growing, averaging about 8.2 per cent. South Sudan grew by 4 per cent in 2010, but the halt in oil production thereafter resulted in a 48 per cent decline in GDP. Overall, subregional growth increased slightly to 5.7 per cent, in 2012, up 0.5 per cent from 5.2 per cent in 2011. The slow progress is largely attributable to the continued sluggishness of the global economy, but real GDP growth in Eastern Africa was forecast to strengthen further in 2014. Growth is now driven principally by the service, construction and transport sectors. With few exceptions, agricultural performance remains poor and variations in the demand for and price of commodities such as minerals are affecting countries reliant on them.

In order for countries to attain sustainable inclusive growth, the emphasis should be placed on value addition and diversifying economic activities. Furthermore, in addition to appropriate macroeconomic and sectoral strategies, the subregion requires, among others, investment in infrastructure, human capital, improved domestic resource mobilization, factor market reforms, incentives to support private sector employment, and efforts to increase productivity to tackle high unemployment rates, thus accelerating the drive towards sustainable development.

Although the subregion has registered appreciable economic growth in recent years, this has not translated into human development, nearly all countries except Seychelles scoring low human development indices of 0.316 - 0.773. Thus, the subregion faces inequitable economic growth and inequality, high poverty rates and unemployment.

Nonetheless, countries in Eastern Africa have made efforts to address social concerns and provide social services to their people. These include improving access to education through the introduction of free education in some countries, and addressing health concerns. However, the subregion still faces social challenges such as high population pressure, food insecurity and persistent hunger, high illiteracy rates, poor health and prevalence of diseases such as HIV/AIDS. The poor and dryland communities in the Horn of Africa are particularly vulnerable to famine.

Environmental problems are among the greatest sustainable development challenges in Eastern Africa. Efforts have been made to develop and promote environmentally friendly policy frameworks and to address specific environmental challenges such as deforestation, drought and pollution. This has resulted in improved land fertility and regeneration of forest cover in some countries – Rwanda, for example – and reduced pollution in others such as Kenya. Other environmental challenges include unreliable energy supply and increased desertification, mainly caused by high rates of deforestation where wood fuel is the main source of energy. The subregion is increasingly suffering the impacts of extreme climatic events, particularly droughts, floods and unreliable rainfall.

While countries in the subregion have registered considerable progress in establishing democratic governance systems, including by regularly holding elections, insecurity concerns remain, with more effort needed to build lasting peace in the subregion. Civil wars, cross-border conflicts, social strife, piracy, and arms trafficking, as well as fragile democracies need to be addressed to enable countries and their populations to focus their resources and energies on sustainable development.

Despite the challenges, Eastern Africa has several opportunities, above all significant natural resources, including: fertile land that could support intensive and mechanized agriculture; forests and national parks; proven oil reserves in countries such as Uganda, South Sudan, Kenya, and Democratic Republic of Congo (DRC); and minerals, such as gold, diamonds wolfram and tin; there are also vast water resources, which could be used for the generation of hydropower. Opportunities also exist in regional integration through RECs (IGAD, EAC, COMESA and ECGLC, for example); and ongoing development strategies and programmes in countries and the RECs that have facilitated a quick response to certain subregional challenges and are advancing new development initiatives. In addition, a high rate of urbanization provides an opportunity to address environmental, social and economic challenges through land consolidation in rural areas and developing the skills of the urban population for gainful employment.

By working together to develop and implement collective programmes, countries can exploit opportunities and overcome the challenges and pressures undermining development in the subregion. This is especially so given that individual country-level initiatives have not delivered to the expected levels, economies remain highly interdependent, and environmental/ecosystem processes do not respect political boundaries.

The following priorities were identified in the policies, strategies, plans and other reports of Eastern African countries and RECs: ensuring economic growth; enhancing wealth creation capacities and job opportunities; developing cleaner sources of energy; combating land degradation and loss of forest resources; preserving biodiversity, and promoting wide participation and inclusion of citizens, the private sector and civil society. They also include promoting peace, security and stability.

In addressing the economic challenges, attention should be paid to reducing dependency on natural resources, especially non-renewable resources. As the population continues to exert pressure on resources, especially agricultural land, productivity will decline, leading to food insecurity.

One of the most pressing social challenges to achieving sustainable development is poverty, especially among women and other vulnerable social groups. Development cannot be sustainable without poverty eradication. Countries in the subregion should focus on reducing poverty by initiating programmes that enable vulnerable groups to engage in income-generating activities.

Food insecurity also needs to be addressed as it has been aggravated by rising food commodity prices in global markets, prolonged droughts in the Horn of Africa, land degradation and climate change, among other causes. The high proportion of the population affected by drought and floods and food price volatility illustrate how food systems remain unstable and vulnerable in eastern Africa. The consequences of food insecurity include undernourishment, with its many negative effects on human health, the poor being most seriously affected.

In order to address challenges and pursue sustainable development in a focused and coherent manner, seven SDGs with corresponding targets and indicators covering a range of economic, social environmental, and governance priorities have been identified for the subregion. The goals have a timeframe of 15 years and are therefore to be achieved by 2030. The goals are: eradicate extreme poverty; ensure food security and adequate nutrition; reduce the unemployment rate; increase and improve existing infrastructure; improve access to health facilities; improve education facilities; promote efficient use of natural resources; and reverse environmental degradation.

A holistic approach is required to translate the proposed goals and targets into concrete sustainable development outcomes, fulfil regional and international commitment to address challenges and leverage opportunities.

The following actions are recommended. Countries should:

- (i) Commit to mobilizing and allocating a significant and increasing share of public financial resources to sustainable development;
- (ii) Effectively mainstream sustainable development into subregional and national development policies, strategies and programmes;
- (iii) Establish platforms to enable the sharing of experiences and scaling-up of best practices;
- (iv) Strengthen mechanisms for effective engagement and involvement of subnational actors and local communities;
- (v) Strengthen formal and non-formal education and awareness programmes on sustainable development;
- (vi) Establish sustainable development centres, including training institutes for knowledge and skills enhancement;
- (vii) Create an enabling environment for private sector participation in sustainable development initiatives; and
- (viii) Strengthen institutional arrangements for sustainable development at subregional and national levels; collaboration and coordination among various organizations at all levels in order to harmonize interventions as well as promote the exchange of best practices and knowledge-networking.

1. Introduction

1.1. Background

The need for the elaboration of sustainable development goals (SDGs) with specific targets for pursuing focused and coherent action on sustainable development at the global, regional, national and local levels was one of the key commitments agreed upon at the United Nations Conference on Sustainable Development (Rio+20) (Rio de Janeiro, Brazil, 20-22 June 2012). This was reflected in its outcome document, “The future we want”,¹ as was the Conference’s recognition that the goals should be consistent with and integrated into the United Nations development agenda beyond 2015.

In order to develop global SDGs to be agreed by the United Nations General Assembly, Rio+20 resolved to establish an inclusive and transparent intergovernmental process on SDGs open to all stakeholders. The Open Working Group on SDGs (OWG) comprising 30 representatives nominated by member States from the five United Nations regional groups was therefore established. The Group was tasked with proposing SDGs incorporating the social, economic and environmental dimensions, as well as their interlinkages, and developing clear and specific targets and indicators that would allow countries to assess progress towards their achievement.

In order to ensure an effective and inclusive process for the elaboration of SDGs, Rio+20 requested the United Nations System to provide the necessary input and support for the work of the OWG and to assist its Regional Commissions (RCs) in collecting and compiling national inputs to inform this global effort.

As a follow-up to the Rio+20 outcomes, the Economic Commission for Africa (ECA), in collaboration with the African Union Commission (AUC), the African Development Bank (AfDB) and the United Nations Department of Economic and Social Affairs (UNDESA), organized the Africa Regional Implementation Meeting (Africa-RIM) in November 2012, to discuss the main outcomes of Rio+20 and their implications for Africa. This multi-stakeholder meeting adopted the Africa RIM Outcome Document for the Rio+20 follow-up processes, and the Twentieth Session of the United Nations Commission on Sustainable Development (CSD-20). The meeting, among other things:

- (i) Recognized the important role that sustainable development goals, based on the Millennium Declaration, Agenda 21 and the Johannesburg Plan of Implementation (JPOI), could play in pursuing sustainable development, and that they should be consistent with and integrated into the development agenda beyond 2015;
- (ii) Reaffirmed the Rio principles on which sustainable development goals should be based;
- (iii) Considered it critical that sustainable development goals complement rather than replace the Millennium Development Goals; and
- (iv) Agreed that goals, targets and indicators should be informed by the outcomes of the Africa process on the Post-2015 development agenda and the sustainable development report on Africa.

In order to ensure that the SDG implementation process was effective and properly coordinated, the Africa RIM called on the international community to provide the region with adequate support to enable an effective, broad-based, bottom-up consultative process to be established for the elaboration of the sustainable development goals.² The main purpose of this call was to ensure African ownership and

¹ Africa Regional Implementation Meeting, outcome document, 2012.

² ECA, Africa Consensus Statement to Rio +20, 2011.

effectively prepare the region to speak with one strong voice to rally international support around SDGs in line with Africa's sustainable development priorities.

Furthermore, ECA, AUC, AfDB and UNDP jointly organized subregional and regional consultations on the Post-2015 Development Agenda in Africa. These consultations were held as follows: Accra in November 2011; Mombasa in October 2012; Dakar in December 2012; and Hammamet, Tunisia in March 2013. The aims of the regional consultation in Hammamet included identifying Africa's priorities for the post-2015 agenda, identifying enablers and critical success factors for the Post-2015 Development Agenda, and aligning the post-2015 priorities with other development programmes and agendas, including Rio+20 and NEPAD (New Partnership for Africa's Development). The meeting adopted an outcome document in which it agreed that the Post-2015 Development Agenda should incorporate the Rio+20 outcomes and the outcomes of Africa-wide initiatives, national and regional consultations and United Nations forums.

The meeting also agreed that the Post-2015 Development Agenda should: (a) emphasize inclusive economic growth and structural transformation; (b) reorient the development paradigm away from externally-driven initiatives towards domestically-inspired and funded initiatives grounded in national ownership; (c) prioritize equity and social inclusion and measure progress in terms of the availability and quality of service delivery; (d) pay greater attention to vulnerable groups such as women, children, youth, the elderly, people with disabilities and displaced persons; and (e) focus on development enablers as well as development outcomes, particularly structural economic transformation and inclusive growth, innovation and technology transfer, human development, and financing and partnerships.

It was against this backdrop that this report on SDGs for the Eastern Africa subregion was prepared. It covers the 14 countries of the subregion, namely, Burundi, the Comoros, Democratic Republic of Congo, Djibouti, Eritrea, Ethiopia, Kenya, Madagascar, Rwanda, Seychelles, Somalia, South Sudan, Uganda and United Republic of Tanzania. The report is one of five subregional reports aimed at preparing African countries to effectively engage in the global SDG process and ensure that the goals agreed upon are in line with Africa's sustainable development priorities. The subregional reports informed the preparation of a consolidated Africa report on SDGs. All the reports were presented at the Africa Regional Consultative Meeting on the SDGs jointly organized by ECA, AUC and AfDB from 31 October to 5 November 2013. The meeting adopted its outcome document as a technical input for consideration by the Africa High-level Committee on the Post-2015 Development Agenda.

The present report results from an analysis of key issues related to SDGs for the Eastern Africa subregion. The report:

- (i) Identifies and analyses the priority sustainable development issues and challenges in the subregion;
- (ii) Identifies, analyses and articulates the priority areas/themes of sustainable development to form the basis for the formulation of the SDGs for eastern Africa;
- (iii) Proposes a concise set of SDGs and associated targets and indicators for the subregion;
- (iv) Provides recommendations and way forward for achieving the proposed SDGs in the context of the subregion.

1.2. Methodology

This report was based on an in-depth desk review and consultations with various stakeholders at country and subregional levels. The desk review covered economic, social and environmental dimensions of sustainable development, as well as governance issues articulated in key national and subregional documents. These included development plans, strategies and annual reports. Key documents and reports

of the intergovernmental organizations (IGOs) and the regional economic communities (RECs) were also reviewed. RECs included the Common Market for Eastern and Southern Africa (COMESA), the East African Community (EAC) and the Intergovernmental Authority on Development (IGAD).

Consultations took place by email and telephone and face-to-face interviews. The resulting draft report was peer reviewed during the Africa Regional Consultative Meeting on the SDGs, at which all 54 African countries were represented. The report was finalized on the basis of the comments and recommendations of the meeting.

1.3. *Outline of the report*

The report comprises five chapters. Chapter I covers the general introduction, which includes background information on the SDG process, the objectives of the report and its methodology. Chapter II discusses major sustainable development issues in the Eastern Africa subregion, while Chapter III presents sustainable development priority thematic areas in the subregion. Based on the analysis of sustainable development issues and priorities, Chapter IV puts forward sustainable development goals, targets and indicators for the Eastern Africa subregion. Recommendations for the implementation of the goals are presented in Chapter V.

2. Major sustainable development issues in the Eastern Africa subregion

2.1. Overview of the subregion

The Eastern Africa subregion comprises 14 countries in the Great Lakes region, the Horn of Africa and Indian Ocean islands. These are: Burundi, the Comoros, Democratic Republic of the Congo, Djibouti, Ethiopia, Eritrea, Kenya, Madagascar, Rwanda, Seychelles, Somalia, South Sudan, Uganda and United Republic of Tanzania. These countries face similar economic, social and environmental challenges, such as inequality, high poverty rates, unemployment and resource degradation.

Eastern African countries have endeavoured to achieve a common subregional integration agenda through the establishment of the regional economic communities (RECs) and the intergovernmental organizations (IGOs) to foster trade and development. Twelve of these countries (Burundi, the Comoros, Djibouti, Democratic Republic of the Congo, Eritrea, Ethiopia, Kenya, Madagascar, Rwanda, Seychelles, Uganda and United Republic of Tanzania) are members of the Common Market for Eastern and Southern Africa (COMESA). Five countries (Burundi, Kenya, Rwanda, Uganda and United Republic of Tanzania) are members of the Eastern African Community (EAC), while, seven countries (Djibouti, Eritrea, Ethiopia, Kenya, Somalia, South Sudan and Uganda), belong to the Intergovernmental Authority on Development (IGAD). By working together to develop and implement collective programmes, member States can more efficiently address the challenges and pressures undermining sustainable development in the subregion.

The East African Community (EAC) focuses on widening and deepening the integration process among its member States in order to enhance growth and development for its growing population. The population of the EAC was about 129.5 million by June 2009, with an average annual GDP growth rate of 2.5 per cent, down from 2.8 per cent in 2007. The infant mortality rate in the subregion ranges from 52 to 106, while the child mortality rate ranges from 74 to 137. Both mortality rates are generally on a declining trend, while in the education subsector, most indicators, including enrolment, completion, transition and literacy rates, showed improvements.³

With regard to economic performance, EAC recorded a decelerated average real GDP growth rate of 4.7 per cent in 2009, compared to 7.0 per cent in 2008. Rwanda recorded the highest real GDP growth of 6.1 per cent, followed by United Republic of Tanzania and Uganda at 6.0 and 5.2 per cent, respectively. In aggregate, total GDP for the subregion amounted to \$74,047 million in 2009, compared to \$72,998 million in 2008. The dominant sector in all the Partner States in 2009 was agriculture, followed by wholesale and retail trade, and manufacturing. The average annual underlying inflation rate for the EAC dropped sharply from 12.8 per cent in 2008 to 6.6 per cent in 2009. In public finance, the ratio of tax revenue to GDP varied from 12.1 per cent (in Rwanda) to 23.4 per cent (in Kenya). In the same period, the tourism subsector recovered slightly, with visitor arrivals growing by a modest 4.0 per cent in 2009, compared to a decline of 7.4 per cent recorded in 2008.⁴

The East African Community is emphasizing interregional development for its member States. Development of infrastructure, which includes road, air and marine transport, has been given special attention by all the EAC Partner States, and there have been subregional efforts to improve infrastructure in the subregion. Energy and ICT have also been emphasized, both at national and subregional level.⁵

The Common Market for Eastern and Southern Africa (COMESA), a successor organization to the preferential Trade Area for Eastern and Southern Africa, came into existence in 1994. COMESA has designed and carried out a wide range of programmes and activities in trade liberalization and

³ East African Community Facts and Figures, 2010.

⁴ Ibid.

facilitation, monetary integration, infrastructure development, ICT, investment promotion, private sector development, peace and security and gender mainstreaming. According to the COMESA investment report, the performance of COMESA member countries has been tremendous and shown overall improvement. Cross-border mergers and acquisitions sales dropped by 19 per cent in COMESA in 2010. Primary industries contributed to this decline, registering an 84 per cent drop in 2010. Tertiary industries, which accounted for 75 per cent of mergers and acquisitions sales, registered an increase in sales of over 200 per cent. Mergers and acquisition purchases registered an increase of 91 per cent, buoyed by increases in both the tertiary and secondary industries of 67 per cent and 53 per cent respectively. This indicates a development of industries that would accelerate growth and development in the subregion.

Infrastructure development is crucial for stimulating investment in many parts of the subregion, the potential for which is underexploited. This is important because improved infrastructure would not only facilitate communications, but also ease the flow of goods and services and the movement of persons within the subregion. Currently, the poor state of infrastructure, particularly roads, remains a major constraint to the performance of the other key sectors in all five east African economies.⁶ With regard to road transport, the launching of the East Africa Road Network project, which concerns some 7,426 km of roads, has been a crucial step in addressing the infrastructure bottlenecks in the subregion. The objective of this infrastructure project is to develop cross-border links with a view to facilitating trade. However, more infrastructure development projects are needed in the island States of the Comoros, Madagascar and Seychelles. Emphasis should be placed on the development of railway lines that facilitate the transportation of goods more cheaply than roads. Railways between countries provide impetus for other development, especially of the industrial sector.

Energy is an essential requirement for all facets of human life. It has been recognized as a basic human need. Energy is a critical infrastructure on which the socioeconomic development of any country/subregion depends. Energy supply to rural areas at a reasonable price is essential for overall development. Equally important is the availability to industry of reliable power at competitive prices to make it globally competitive and able to exploit the tremendous employment-generation potential. Reliable electricity supply is also crucial for sustained growth of the service sector, which is growing fast in the region. As energy is one of the key drivers of rapid economic growth and poverty reduction, the provision of adequate energy services will play a leading role in achieving the Millennium Development Goals (MDGs).⁷

The regional economic communities have strengthened the role of their member States in delivering and achieving sustainable development. IGAD, one of the regional economic communities in the Eastern Africa subregion, has the objective of enhancing the integration of environmental and natural resources concerns into development frameworks for environmentally sustainable development in the subregion. This is a response to the many challenges facing the subregion as a whole, particularly the sustainable management of natural resources and environmental protection. The IGAD subregion includes a wide variety of climates and landscapes: mountain glaciers, tropical rain forests, and grasslands, as well as arid and semiarid areas, among other features. However, it is prone to recurrent hazards such as drought and floods making it one of the African subregions most vulnerable to climate variability and change. Despite the high risks, disaster risk management is given low priority by governments and donors alike, and disaster response is largely reactive. Resources and funds are available when there is an emergency, but there is little long-term development of disaster risk management capabilities or prevention, mitigation and preparedness measures.

The IGAD subregion experiences persistent economic crises, largely as a result of severe environmental and natural resource degradation.⁸ This, exacerbated by recurrent drought and other natural and man-made disasters, results in perpetual poverty and underdevelopment, which aggravates the degradation of natural resources and the environment, thereby continuing the vicious cycle.⁹ The IGAD subregion has a wealth

5 EAC, Development Strategy, 2006.

6 Ibid.

7 COMESA, Integrated Planning Strategy, 2009.

8 IGAD, Environmental and Natural Resources strategy, 2007.

9 Ibid.

of natural resources with the potential to drive economic growth and social development. However, full environmental and natural resource potential has not been achieved for a number of reasons, including: the rapid growth rate of a largely rural, peasant and heavily natural resource-dependant population; natural disasters; and institutional weaknesses. Despite the efforts that have been made, environmental and natural resource degradation is therefore still evident in the IGAD subregion.¹⁰

Sixty per cent of the total land area of the IGAD subregion is classified as arid, receiving less than 500 mm of rainfall annually. This makes rainfall the most important climatic factor in the subregion. Rainfall is low, unreliable and unevenly distributed and, although there have always been cycles of drought and flooding, there is evidence to suggest that the climate is becoming more and more unstable and the weather effects more devastating. All this affects sustainability levels and requires appropriate policy actions. IGAD has continued to build efforts that will lead to the development of such instruments at the national level, which will in turn allow for cross-border harmony. The environment policy issues relevant at the subregional level concern strategic areas of cooperation. IGAD has initiated support and led the process of harmonizing environment and natural resources policies.

Strategies and measures for the sustainable management of natural resources can support broad improvements in livelihood security and household and community capacity to cope with climate impacts. Specific examples observed include both autonomous natural resource management (NRM) efforts, such as the water resource management systems developed in Darfur state, South Sudan, and those stimulated by NGOs or other external organizations, such as the rangelands rehabilitation programme put in place in Bara Province, Kordofan state, also in South Sudan.¹¹

2.2. Main sustainable development challenges and opportunities in the subregion

The priority sustainable development challenges identified in eastern Africa, their causes and implications, and the opportunities, are interrelated.

2.2.1 Economic development challenges

Across the Eastern Africa subregion, countries have in recent decades produced ambitious plans to attain higher levels of economic and social development. Beginning in the late 1980s, many countries undertook structural adjustments with the aim of improving economic performance and reducing poverty. In the 1990s, many countries in the subregion devised development strategies in the context of poverty reduction strategy papers (PRSPs). However, the agenda was generally donor-driven.¹² Over the last decade, countries have made concerted efforts to come up with their own plans. Examples of these are Vision 2025, adopted by United Republic of Tanzania in 1999, with the objective of achieving a growth rate of 8 per cent per annum; and Vision 2020, adopted by the Rwandan Government in 2002. Rwanda's Vision 2020 aims for a 30 per cent increase in access to electricity and a surge in national energy production from 80 megawatts to 1000 megawatts, and the extension of financial services to 80 per cent of the population. Kenya has adopted Vision 2030, aiming to make Kenya a middle-income economy through a highly competitive and prosperous enabling environment.

Priority country policy actions for the Eastern Africa subregion focus heavily on increasing economic growth through infrastructure development, human development and capacity-building, natural resource management and other economic aspects.¹³ The aim is to work towards eliminating poverty.

¹⁰ Ibid.

¹¹ AIACC, *Environmental Strategies for Increasing Human Resilience in Sudan*, 2006.

¹² ECA, *Africa Consensus Statement to RIO +20*, 2012.

¹³ *Africa's regional economic communities*, 2008.

Economic growth has been impressive over the last six years, despite the global financial crisis. Several of the subregion's economies are among the fastest growing economies in the world, with Ethiopia, Rwanda and Uganda leading (table 1). Subregional growth slightly increased by 0.5 per cent to 5.7 per cent in 2012, up from 5.2 per cent in 2011. Slow progress is largely attributable to the continued sluggishness of the global economy. Real GDP growth for eastern Africa is forecast to strengthen further in 2014. Growth is driven principally by the service, construction and transport sectors. With few exceptions, agricultural performance remains poor.

Table 1: GDP growth in the Eastern Africa subregion, 2010-2012 (% annual change)

Country	2010	2011	2012	Average (2010-2012)
Burundi*	3.9	4.5	4.8	4.4
Comoros	2.1	2.5	3.5	2.7
Djibouti*	4.5	5.4	6.1	5.3
DRC*	5.4	7.0	6.8	6.4
Ethiopia*	8.0	8.5	8.0	8.2
Eritrea*	1.8	2.8	3.2	2.6
Kenya	4.1	5.8	6.3	5.4
Madagascar	2.0	2.8	4.7	3.8
Rwanda	5.4	5.9	6.4	5.9
Seychelles	4.0	5.0	5.0	4.7
Somalia				
^a South Sudan	4	2	-48	-14.0
Uganda	5.8	6.1	6.5	6.1
United Republic of Tanzania	6.5	6.7	7.5	6.9
Average	4.1	5.2	5.7	5.0

***Estimates** (sources: ECA, 2012 and aWorld Bank, 2013). ^aOmitted from subregional average as outlier (48 per cent decline in 2012).

The degree to which the economies of the region are vulnerable to the current global shocks varies according to their levels of exposure (determined by certain economic characteristics such as their dependence on commodity exports or ODA) and the resilience of certain commodities (their ability to cope with and respond to the shock determined by such factors as the level of foreign exchange reserves, the state of public finances, etc.).

For example, Ethiopia's GDP grew at an estimated 8.0 per cent in 2012, down from 8.5 per cent a year earlier. Despite the slowdown in economic growth, there were a number of favourable macroeconomic trends in terms of declining inflation, and a recovery in agricultural production in 2012 after the drought of 2011. Rwanda, the second fastest growing economy in the subregion, grew at 6.4 per cent in 2012, partly driven by a strong performance in the services and industry sectors. In addition, South Sudan experienced a huge decline in 2012 due to a halt in the country's oil production. Other examples of factors that influence growth in the subregion include: the prices of minerals such as gold, especially for United Republic of Tanzania and the DRC; tourism, especially for Seychelles and Kenya; and agricultural productivity, which is in turn influenced by climate variability.

Furthermore, despite data limitations, there has been a significant recovery in the Somali economy, particularly in the capital Mogadishu. Somalia has seen increased stabilization, especially in 2012. Over the course of that year, the return of diaspora Somalis gained pace, with many qualified people with financial resources setting up new businesses or undertaking reconstruction.

Therefore, economic progress in the subregion tracks changes in resource productivity. In order for countries to improve their growth rates and attain sustainable inclusive growth, priority should be given to value addition and countries should graduate from mainly exporting raw materials or primary produce to transformation into final products, thus achieving a diversified export base that would increase economic growth rates, which are still relatively low in the subregion. In addition to a comprehensive development planning framework incorporating well-designed and implemented macroeconomic and sectoral strategies, the subregion requires appropriate investment in infrastructure and human capital, improved domestic resource mobilization, factor market reforms, incentives to support private sector employment, and efforts to increase productivity to tackle the high unemployment rates, thus accelerating the drive towards sustainable development.

(a) Poverty in the Eastern Africa subregion

While there are indications that poverty levels have significantly decreased in the Eastern Africa subregion, the average poverty rate of 47.5 per cent is still very high. Individual country poverty levels show worrying trends. Country statistics paint the following picture: Burundi 67 per cent (2008), Ethiopia 29.2 per cent (2010), Kenya 46.6 per cent (2006), Rwanda 56.9 per cent (2006), Uganda 24.7 per cent (2010), United Republic of Tanzania 35.7 per cent (2001). The individual country statistics suggest that over 100 million people in the subregion live below the poverty line, with most of the poor living in rural areas. The rural population, which constitutes more than 70 per cent of the total, depends on agriculture for food and livelihood. Based on the simple calculation of applying the most recent estimate of poverty incidence to each country's population in 2010, more than 53 million people were living below the poverty line in Eastern Africa.¹⁴ The incidence of poverty in eastern Africa is increasing faster than the population. Overall, the pace of poverty reduction in most of Africa has slowed since the 1970s¹⁵ with variations among countries. United Republic of Tanzania, Uganda and Rwanda have been able to reduce the proportion of the population living below their nationally defined poverty lines. Uganda's improvement from 54 per cent to 25 per cent of the population is significant. Kenya seems to have lost ground, as 46 per cent of its population were below the poverty line in 2006, compared to 40 per cent in 1994. Poverty incidence has remained high in Burundi.¹⁶

High rates of population growth in the subregion have created some headwind against poverty reduction efforts. United Republic of Tanzania saw an increase of 4.9 million living below the poverty line over a 17-year period. During the same period, 8.2 million Kenyans fell below the country's poverty line. Uganda's lifting of 2.3 million of its citizens above the poverty line over an 18-year period stands in sharp contrast to its neighbours. The steady increase in the Seychelles population is attributed to a birth rate of 18.1 per 1000 persons per year and the pressure of human development on the fragile and limited resource base of the country is expected to increase significantly by 2020.¹⁷ Rwanda's reduction of poverty incidence by 12 per cent between 2000 and 2011 lifted 100,000 out of poverty.¹⁸ Indeed, there have been efforts to tackle increasing rates of poverty in the subregion, but there are still high poverty levels that require attention.

Other factors influencing variations in poverty rates among countries of the subregion include reduction in per capita food production as a result of a rapidly growing population. Only four countries – Ethiopia, Djibouti, Rwanda and United Republic of Tanzania – were able to boost levels of output per capita across the subsectors, with Rwanda outperforming the whole subregion in cereal production (Ethiopia and Rwanda also maintained a steady growth of the cash crops tea and coffee).¹⁹ Seychelles, with its high average income per capita, the production shortfalls did not translate into an appreciable increase in food insecurity. However, in Burundi and DRC, with close to 70 per cent of the population living under the

14 Society for International Development, *The State of East Africa 2012: Deepening integration, intensifying challenges*.

15 World Bank, *Annual Report 2009*.

16 Society for International Development, *op.cit.*

17 National Report, Republic of Seychelles, 2012.

18 Society for International Development, *op.cit.*

19 ECA (2012c), *Main Outcomes of the United Nations Conference on Sustainable Development: Implications for Africa*.

poverty line, production shortfalls led to a sharp increase in vulnerability to external food price shocks, such as those seen in 2007-2008 and 2011.

Rural poverty in many areas of eastern Africa has its roots in the colonial system and the policy and institutional restraints that it imposed on populations. The percentage of rural poor living below the national poverty line varies dramatically and is as high as 90 per cent in Somalia to about 27 per cent in Uganda. The rural poor constitute about three quarters of Somalia's poor. In recent decades, economic policies and institutional structures have been modified to close the income gap but have produced limited positive impacts. Structural adjustments have dismantled existing rural systems, but have not always given rise to new ones. In many transitional economies, the rural situation is marked by continuing stagnation, poor production, low incomes and rising vulnerability of poor people. Lack of access to markets is a problem for many small-scale enterprises in eastern Africa. The rural population is poorly organized and often isolated, beyond the reach of social safety nets and poverty programmes. Increasingly, government policies and investments in poverty reduction tend to favour urban over rural areas.

In conflict-affected countries in Africa, the capacity of rural people to make a livelihood has been drastically curtailed, and per capita food production has plummeted.²⁰ Although there are variations among countries, rural livelihoods have improved as a result, among others, of the existence of an agricultural sector strategy and enhanced capacity development.²¹

Land degradation, a consequence of extensive agricultural production, deforestation and overgrazing, has reached alarming levels and further threatens livelihoods, especially of the poorest. The poorest people live in isolated zones, deprived of the social safety nets and poverty reduction programmes available in semi-urban and urban areas. Rural poverty has already forced some people to migrate to urban areas, but the scale of migration over the next 20 years is likely to be great and to have many social consequences. For instance, every year some 250,000 Kenyans move to cities, while rural areas are becoming increasingly urban.²²

If not well managed, migration on this scale leads to slums, higher crime rates and more congestion. It does, however, facilitate the provision of social services, the unit cost of which declines in more densely populated areas. It also makes the provision of infrastructure cheaper. So the trends present opportunities for development as well as challenges.²³

The progress of national and rural development is slow in the subregion. Development assistance to agriculture has declined. This has a negative impact on smallholder farming, the basic source of livelihood for the rural poor. In general, agricultural productivity per worker is stagnating or decreasing. More than 85 per cent of the rural poor live on land that has medium to high potential for increased productivity.

Poverty in the subregion has remained pervasive among women, especially in rural and peri-urban areas. Promotion of agricultural transformation that markedly increases production, productivity and incomes in the subregion would yield the desired development dividends. Since all countries in the subregion depend on agriculture, focused attention on poverty reduction and sustainable livelihoods among smallholder farmers could lead to high economic growth rates.

(b) Household food security

It is widely believed that broad-based and sustained agricultural growth is the key to overall growth and development in Africa. Much of the subregion depends on agriculture as a main economic activity. Its contribution to GDP in most countries exceeds 25 per cent, and is as high as over 40 per cent in countries

²⁰ International Fund for Agricultural Development, Annual Report, 2010.

²¹ African Capacity-building Foundation. Africa Capacity Indicators Report 2012. Capacity development for agricultural transformation and food security.

²² World Bank, Annual Report 2011.

²³ ECA (2012c), op. cit.

such as the Democratic Republic of Congo, Ethiopia, Rwanda and United Republic of Tanzania. In Burundi, the economy is dominated by the primary sector made up essentially of agriculture, which contributes half of GDP and nearly 80 per cent of export earnings. In Rwanda, where agriculture employs 80 per cent of the population and accounts for over a third of GDP, agricultural output is predominantly in the informal sector, and one third is still produced in the non-monetary economy.

Agriculture will continue to drive exports and economic growth in most African countries for several years to come, and this has significant implications for food security. The subregion's food security situation has worsened as a result of increasingly tight global markets, with adverse implications for the poor, who spend a large proportion of their incomes on food. This translates into overall inflation, creating fiscal pressure and social instability, thus delaying progress towards achieving the MDGs.

Food insecurity is one of the most pressing problems in the subregion. It has been exacerbated in recent years by two factors: first, there has been a considerable decline in the level of food production in the subregion; second, the price of food has dramatically increased in the last two years, making food effectively unavailable to many households. The vulnerability associated with food shortages is exacerbated by the large number of small-scale farmers, who depend on the foodstuffs they produce for both food and income. The majority of the small-scale farmers produce mainly for subsistence, however, and this affects trade in the agriculture sector and perpetuates poverty.

There are significant numbers of pastoralists in the subregion, especially in the Horn of Africa, including in Somalia, Djibouti, Ethiopia, Kenya and Eritrea. Pastoralists are mainly engaged in rearing animals and rarely cultivate land for crops. Limited rainfall and generally harsh climatic conditions mean that the Horn experiences frequent famines, which trigger food insecurity. There is a need for both short-term responses and long-term strategies to ensure that, while livestock is maintained to generate income and contribute to food security, alternative and/or additional livelihood strategies are encouraged.

The International Food Policy Research Institute (IFPRI) uses the Global Hunger Index to measure and track hunger throughout the world. The index is a composite measure of undernourishment (the proportion of undernourished people as a percentage of the population, reflecting the share of the population with insufficient caloric intake), child underweight (the proportion of children younger than age five who are underweight, indicating malnutrition), and child mortality (the mortality rate of children younger than age five).

Countries are ranked on a 100-point scale where 0 is the best score (no hunger) and 100 the worst. The severity of hunger is shown on a scale where 0 < 4.9 is considered a low level of hunger, 5.0 – 9.9 moderate, 10.0 – 19.9 serious, 20.0 – 29.9 alarming, and > 30 extremely alarming (IFPRI and others, 2012). Table 2 suggests that the situation of hunger was alarming and extremely alarming in the majority of countries in the Eastern African subregion throughout the 1990s, while in Uganda it was serious. In 2012, only Kenya, Rwanda, Uganda and United Republic of Tanzania faced hunger problems. In its Human Development Report 2012 the UNDP discussed the paradoxes of food insecurity and its relationship with human development in sub-Saharan Africa, highlighting the persistence of hunger and malnutrition in this subregion, despite abundant land and water resources. According to this report, three factors are responsible for the critical food situation in the subregion: limited food production, natural disasters and volatile food prices.

Although cereals are a major staple food in eastern Africa, no country in the subregion is a net exporter of cereals (table 2). This means that countries rely on food imports to secure food for their populations, thus overspending the available foreign exchange. Furthermore, the subregion receives more than half of total food donated to sub-Saharan Africa. Despite food imports and food aid, all the countries in the subregion, apart from Madagascar, Seychelles and Uganda, suffer from calorie deficits as they have not yet been able to achieve the 2,100 kilocalories per person per day considered the minimum nutritional requirement.

The Africa Human Development Report 2012 suggests that cereal production in sub-Saharan Africa had tripled, rising from 38 million tons in 1961-1963 to 116 million tons in 2008-2010. Ethiopia has registered improved production, from 1,351.2 kg per hectare in 2002 to 1,760 kg per hectare in 2011. Uganda's production increased significantly from 1,638 kg per hectare to 2,099.4 kg per hectare in 2011, although there was a slight decline in 2011.²⁴ On the other hand, there has been a significant fall in Somalia, where production decreased from 769.5 kg per hectare in 2002 to 466.2 in 2011, and in United Republic of Tanzania, where it fell from 1,902 kg per hectare in 2002 to 1360.9 in 2012. Nonetheless, overall, the production of cereals in the subregion has improved but there are still gaps in production that vary from country to country, as indicated in table 2.

Table 2: Cereals production in the Eastern Africa subregion (2002-2011)

Country Name	Years									
	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Burundi	1334.3	1286.7	1353.9	1327.9	1297.7	1370.9	1318.3	1319.4	1321.5	1325.6
Comoros	1168.6	1197	1254.8	1284.6	1322.2	1379.7	1290.5	1403.2	1417.8	1411
DRC	772	771.5	771.7	771.7	771.6	771.6	771.6	771.6	771.5	765.8
Djibouti	1666.7	1666.7	1833.3	1500	1666.7	1857.1	1500	1222.2	1444.4	2000
Eritrea	158.2	261	275.3	758.2	798.5	938.5	252.2	500.1	535.7	591.6
Ethiopia	1351.2	1121.8	1170.9	1362.1	1651.9	1392	1421.8	1652.9	1682.5	1760.8
Kenya	1488.5	1594.1	1806.3	1646.3	1646.7	1773.4	1417.7	1242.7	1709.7	1514.3
Madagascar	1966	2202	2354	2516	2396	2433	2440	2464	2448	2503
Rwanda	1027.4	944.3	959.3	1183.6	1117.8	1014.6	1278.5	1747.9	1930.1	1950.1
Seychelles										
Somalia	769.5	687.5	497.6	472.3	395.1	434.5	337.9	360.7	409.8	466.2
South Sudan	-	-	-	-	-	-	-	-	-	-
Uganda	1638.8	1677.6	1468	1532.1	1522.9	1525.2	1538.3	2062.9	1996.6	2099.4
United Republic of Tanzania	1902.9	859.6	1370.1	1100	1339.2	1449.4	1324.7	1110.4	1646.7	1360.9

Negative values would indicate that a country is a net exporter.

Source: World Bank, World Development Indicators 2012.

The report also indicates that similar trends emerge for other crops where overall production increased over the years, but per capita production fell or remained stagnant.²⁵ This suggests that food production is not keeping pace with population growth in the subregion. The report also points out that increased food production in eastern Africa is a result of an expansion in land area cultivated. Farmers continue to depend upon traditional farming practices that rely more on local varieties and little in the way of fertilizers, pesticides and irrigation.

Food imports are used to compensate for deficiencies in food production but natural disasters, volatile food prices and conflict undermine these interventions and exacerbate food insecurity in the subregion. Drought and flooding destroy crops, erode soil, and prevent people from farming. Price volatility makes food inaccessible to many people who cannot afford it. Table 3 shows the number of people affected by drought and floods in the subregion, and the level of food price volatility. The major causes of food insecurity in the subregion are drought and floods, which have affected 42,977,000 million people and 3,218,000 million people, respectively over the 2005-2011 period. Food insecurity is alarming as erratic weather conditions and conflict destroys and/or reduces production. A measure of variation in food prices over time indicates that food prices multiplied four times between 2008 and 2010, undermining food accessibility for many people whose purchasing power remains limited.

²⁵ UNDP, Africa Human Development Report, 2012.

The high proportion of the population affected by drought and floods over the years and the high volatility of food prices illustrate how food systems remain unstable and vulnerable in the subregion. The consequences of food insecurity include undernourishment, with its wide range of negative effects on human health. The level of undernourishment among the population in the subregion is alarming (table 3). According to the UNDP annual report 2012:

- (i) Many people in the subregion are undernourished or have unbalanced diets in which basic nutrients are lacking;
- (ii) The majority of countries experience disturbing levels of food deficits as they score values approaching or above 300, which are high depths of hunger;
- (iii) Approximately 61.4 per cent of the population in the subregion suffers from anaemia; and
- (iv) Approximately 3.6 per cent of the population in the subregion suffers from vitamin A deficiency. Poor nutrition and/or insufficient dietary intake is the main cause of high levels of anaemia, vitamin A deficiency, and malnutrition, with grave consequences such as reduced physical strength and lost productivity, increased risks of infectious diseases, maternal mortality.

More needs to be done to increase food security in the subregion, where net food imports have increased as a result of a growing population, fast economic growth and rapid urbanization, coupled with insufficient improvement in agricultural productivity.²⁶

Table 3: Selected indicators affecting food security in the Eastern Africa subregion

Country Name	Population affected by drought (in 000's) 2005/2011	Population affected by floods (in 000's) 2005/2011	Food price volatility (coefficient of variation) 2008/2010	GHI scores 2012	Food aid deliveries (in 000's tonnes, 2009)	Net cereal imports kg per capita 2007/2009	Cereal production/ per capita kg 2008/2010
Burundi	2,413	24	4.1	37.1	62.05	7	36.9
Comoros	0	3	1.7	25.8	7.50	62	35.4
DRC	-	-	-	-	-	-	-
Djibouti	-	-	-	21.7	-	-	-
Eritrea	1,700	-	8.7	34.4	0.01	27	37.7
Ethiopia	20,006	1,118	7.8	28.7	978.54	17	181.1
Kenya	11,055	1,272	3.8	19.3	269.36	38	83.1
Madagascar	734	92	2.2	22.5	22.23	13	239.8
Rwanda	1,000	19	4.9	19.7	28.98	9	60.0
Seychelles	-	-	7.2	-	0	217	-
Somalia	-	-	-	-	-	-	-
South Sudan	-	-	-	-	-	-	-
Uganda	2,369	537	6.8	16.1	111.67	11	87.7
United Republic of Tanzania	3,700	68	2.1	19.3	29.31	13	141.4

Source: UNDP 2012 report, IFPRI and others, 2012, Country Global Hunger Index Score.

²⁶ African Capacity-building Foundation. Africa Capacity Indicators Report 2012. Capacity development for agricultural transformation and food security.

(c) Natural resources dependency burden

The dominant role of agriculture in the subregion means that countries are very dependent on natural resources. With increased population and higher population density expected in the future, the pressures on the subregion's natural resources will intensify further.²⁷ One clear indicator is the high rate of deforestation. Between 1990 and 2010, eastern Africa's forested area shrank by 22 million hectares and deforestation will continue to increase as populations rise.²⁸ The high population density in countries such as Rwanda, Burundi and Kenya has resulted in increased pressure on natural resources, leaving only small, scattered plots available for cultivation.

The importance of land in development in the subregion is underlined by the fact that approximately 60 per cent of the population derives its livelihood and income mainly from farming, livestock production, and related activities. In EAC member States, almost 48 per cent of the land is under agriculture. In addition, livestock production is an important activity in the countries of the Sahel and the Horn of Africa.²⁹

In many instances, unequal distribution of land has relegated a growing population of small farmers to marginal areas, leading to increasing physiological pressure and land and resource degradation, including deforestation. In many parts of the Eastern Africa subregion, heavy downpours accompanied by flooding and intermittent drought have also tended to accelerate soil erosion and land cover losses. This remains true despite the continent's enormous and untapped subterranean resources.

Efforts to reform landholdings by indigenous communities through a variety of measures, including individual and group titling or appropriation for cash-crop production in a number of countries in the subregion, have had limited success as a result of social and cultural attachment to land. In some cases, reform measures have met with confrontation and conflict, as in Kenya, and Uganda.³⁰ Consequently, reform has not adequately restructured the dualistic landholding systems resulting from colonization or improved government support for the development of the disadvantaged indigenous land tenure systems.

High dependency on natural resources exposes countries to the risks of resource depletion due to inappropriate use, inadequate planning and ill-informed investments by both public and private sectors. The most significant resource in the subregion is land and the recent surge in large-scale land-based investments and joint ventures for mineral extraction threaten sustainable land management.

Poor management and regulation of the negative environmental and social impacts of mining have fuelled criticism and, in some cases, hostile attitudes towards the mining industry and governments among affected communities and a range of civil society organizations. These impacts could be reduced and their effects mitigated, where they are unavoidable. A multi-pronged approach is required to address the adverse environmental and social impacts of mining. Governments need to strengthen the frameworks governing environmental and social impact assessment, management and regulation.³¹

While revenue from mineral operations offers governments development finance, the inflow of revenue has to be carefully managed as it tends to undermine the competitiveness of other economic sectors exposed to international competition – the so-called “Dutch disease”. Financial inflows from mining need to be channelled into long-term physical and social capital and include systems that allocate part of the mineral revenue to communities near mining areas and to local authorities. “Price discovery” – setting a fair market price for resources – is very important and can help to optimize the developmental impact of mining. Transparent and competitive award of concessions for known mineral assets is a factor in this.

27 Society for International Development, op.cit.

28 Ibid.

29 AU, ECA, AfDB, Africa Consensus Statement to Rio+20, 2010.

30 African Development Foundation, Drought resilience and sustainable livelihood programme in the Horn of Africa Phase I, 2012.

31 Africa Mining Vision, 2011.

The seasonal migration of nomadic pastoralists and their herds to and from dry season forage and water supplies located in permanently watered areas take place in arid and semi-arid environments throughout the subregion. The Horn of Africa (Somalia, Eritrea and Ethiopia) is more severely affected by drought and famine than any other part of the continent. The repeated underperformance of large-scale African irrigation schemes over the last 20-30 years, together with high costs, land expropriation and resettlement problems, has resulted in a widely held perception that such projects have failed to reduce food deficits and increase agricultural productivity.

(d) High unemployment rates

Unemployment and underemployment continue to be pressing economic and social issues in both developed and developing countries. Unemployment and underemployment are among the direct causes of poverty in the subregion and the rest of Africa. The general level and rate of unemployment (both indices of poverty levels) are very high in Africa, with the youth and women being most affected. The unemployed also include university graduates, school leavers and dropouts, and highly skilled and experienced professionals. Unemployment is one of the causes of the serious net brain drain experienced by the continent.

According to Rwanda national bureau of statistics reports, overall unemployment was 1.2 per cent in 2005-2006 but 2.5 per cent among the 21-30 age group. The Rwandan unemployment rate increased to 30 per cent in 2009, however.³² The unemployment rate in Kenya increased from 12.7 per cent in 2006 to 40 per cent in 2011, while the average rate between 1999 and 2011 was 22.43 per cent.³³ In 2009, youth accounted for 60 per cent of the unemployed in the country.³⁴ As of 2009, Burundi had an unemployment rate of 35 per cent.³⁵ It is estimated that 60 per cent of the unemployed in the country are young people looking for their first job³⁶. The human resource base of Seychelles is very small and a chronic lack of professionals in all sectors hampers progress towards sustainable development.³⁷ Although the country has an educated population, with literacy rates nearing 100 per cent, the majority are educated only to post-secondary level and cannot therefore access graduate jobs. In Somalia, unemployment is very high among the youth, having risen from 47 per cent in 2002 to 54 per cent in 2011.³⁸ In United Republic of Tanzania, the unemployment rate is relatively low, having fallen from 11.7 per cent in 2007 to 10.7 per cent.³⁹ Job creation, especially for youth, should be a top priority for all countries in the subregion. Human capital is vital for economic development and governments need to take steps to see that human capacity matches existing and future labour market needs, developing skills throughout the subregion.

Direct government job creation efforts depend heavily on donor funding and may not therefore be sustainable in the long run. The resources allocated to job creation should come primarily from domestic sources (public and private) and only be supplemented by external resources. Eastern Africa's high and growing unemployment rates stem from the supply and demand sides: a rapidly growing labour supply as a result of high population growth rates, increased labour participation, and a slow growth in labour demand because economic growth has been both insufficient and dependent on capital-intensive enclave sectors with low employment elasticity.⁴⁰

As in most sub-Saharan African countries, most people are engaged in the agriculture sector. Non-agricultural employment is insignificant, particularly for the poor. Female employment in agriculture varies across countries, but it is common to find that women work disproportionately as unpaid workers on family farms and plots and as own-account smallholder producers. Earnings generally tend to be lowest

32 National Institute of Statistics for Rwanda, Annual Report 2009.

33 Kenya National Bureau of Statistics, Annual Report 2012.

34 The Kenyan national bureau of statistics indicated in its Report for 2009.

35 AFDB/OECD 2010.

36 Burundi, African economic outlook 2012.

37 National Report, Republic of Seychelles.

38 Somalia, Human Development Report, 2012.

39 National Bureau of Statistics for Tanzania, Annual Report 2012.

40 Economic Report on Africa 2010.

and poverty risks highest in agricultural activities, and this is particularly true for women working in agriculture. Furthermore, gender inequality in employment needs to be addressed extensively by engaging all relevant partners. Equitable distribution of resources through employment opportunities would ensure equal opportunities in resources utilization and access to property rights among the population.

The economy's potential to create jobs in the subregion is not well understood. It is likely to hinge on individual entrepreneurial energy on the supply side to produce tangible goods and services, and deepening markets for those goods and services on the demand side.⁴¹ The mobile phone revolution has created hundreds of jobs in the services sector. Employment in the informal sector is still low. Small and medium enterprises can have a significant positive job creation and poverty reduction impact, while single-person, rural-based, non-farm small and medium enterprises have only a minimal impact on employment creation.

2.2.2 Social Development Challenges

Sustainable development does not only depend on economic growth but also on the extent to which social inclusion and cohesion are integrated in policy formulation and implementation. Countries that attain fast economic growth may perform poorly in terms of improving human development indicators (e.g. life expectancy, infant mortality, etc.). Conversely, some countries have achieved enormous progress in terms of human development, despite a sluggish economic performance.⁴²

The United Nations Development Programme (UNDP) uses the human development index (HDI) as a composite indicator combining life expectancy, educational attainment and income, to measure the social and economic development of countries worldwide. Based on their human development performance, countries are classified into four categories: very high, high, medium and low. Low levels of per capita income, notwithstanding, economic progress recently achieved in the subregion has not translated into relative improvement in human development. In 2011, apart from Seychelles, which was ranked among the very high human development performers, all the other countries in the Eastern African subregion were in the low human development category (table 4).

Eastern Africa also scored relatively low in the human development index ranking compared to other subregions. Its average human development index was 0.455 in 2011, while sub-Saharan Africa scored 0.475. It also scored low compared to other parts of the world such as South Asia with 0.558, East Asia and Pacific with 0.683. The average life expectancy of the subregion was 59.6 years⁴³ in 2011, which is relatively low compared to the world average life expectancy of 67.5 years.

This poor human development index performance is a direct consequence of the serious challenges now facing countries in the subregion. Despite improvement in the human development index as a result of lower maternal and child mortality, there are still key challenges. Poverty is one: United Republic of Tanzania, Uganda and Rwanda have been able to reduce the proportion of the population living below their nationally defined poverty lines, while other countries, such as Burundi and Somalia, are still struggling. In addition, the subregion is still faced with the challenge of poor life expectancy, although there are indications that there has been an average increase of two years in life expectancy, partly due to higher investment in health care spending by national governments.

The 2011 rankings indicate that, of the 14 countries comprising Eastern Africa, ten have registered no change from the 2010 rankings, Djibouti and Madagascar have moved down one and two places respectively, while Kenya and United Republic of Tanzania have each moved up one place. Seychelles is the highest ranking country in the subregion at 52nd place in 2011. The lowest ranking country in the subregion is Democratic Republic of Congo, at 187th place (Somalia would also rank among the lowest, if data on per capita income were available).⁴⁴

41 Society for International Development, op. cit.

42 ECA 2012e.

43 UNDP, Human Development Report, 2012.

44 ECA, Tracking progress in macroeconomic and social developments in Eastern Africa, 2012.

Policymakers and implementing agencies in the subregion need to understand clearly the social aspects of development and integrate them into the development agenda in order to enhance the capability of individuals and their families to improve their well-being and lives. Social development is considered a means of creating a more equitable distribution of wealth and assets.⁴⁵ Key social services and concerns should be given priority in the pursuit of sustainable development goals. These include the provision of social protection services, health insurance, service for people with disabilities, and tackling the high rates of youth unemployment.

Table 4: Human development indicators and their subcomponents in the Eastern Africa subregion

HDI Rank	Country	HDI value 2011	Life expectancy	Mean years of schooling 2011	Expected years of schooling 2011a	GNI per capita 2011	GNI per capita minus HDI rank	Non-income HDI
52	Seychelles	0.773	73.6	9.4	13.3	16,729	-4	0.794
143	Kenya	0.509	57.1	7.0	11.0	1,492	15	0.584
151	Madagascar	0.480	66.7	5.2	10.7	824	26	0.605
152	United Republic of Tanzania	0.466	58.2	5.1	9.1	1,328	10	0.523
161	Uganda	0.446	54.1	4.7	10.8	1,124	7	0.506
163	Comoros	0.433	61.1	2.8	10.7	1,079	9	0.488
165	Djibouti	0.430	57.9	3.8	5.1	2,335	-25	0.420
166	Rwanda	0.429	55.4	3.3	11.1	1,133	1	0.477
174	Ethiopia	0.363	59.3	1.5	8.5	971	0	0.383
177	Eritrea	0.349	61.6	3.4	4.8	536	6	0.421
185	Burundi	0.316	50.4	2.7	0.5	368	0	0.412
187	DRC	0.286	48.4	3.5	8.2	280	-1	0.399
	Somalia		51.2		2.4			

Source: UNDP 2011

(a) Population pressure and human development

The human development index in the subregion has improved over the last five years, as demonstrated by the improved indices for each country. People are living longer, with an average increased life expectancy of two years. Per capita spending on health has increased in almost all countries, Rwanda having the highest level, with \$48 in 2009, followed by Uganda with \$43.⁴⁶ As a result, and with investments in maternal and child health, fewer mothers are dying in childbirth and more children are surviving infancy. However, the fact that there has been little change in the rate of stunted children suggests there has been little improvement in the quality of nutrition in the subregion. The focus should be on improving the nutritional welfare of mothers and children, especially those under the age of five years.

Life expectancy at birth has improved in all countries in the subregion except the Democratic Republic of Congo (table 4). Data was not available for Somalia, where life expectancy is still low at 51.2, expected years of schooling being 2.4. This means that education and health, especially primary enrolment and post-primary education, should be prioritized if sustainable development is to be achieved. Many challenges stem from the quality of primary school education. Many children are not learning effectively and not performing at the level they should.⁴⁷ The high malnutrition rates evident in stunting may be a significant factor in poor primary school performance. In the pursuit of sustainable development, primary school education needs to be given particular emphasis as it is the basis for all other educational levels.

⁴⁵ EAC, African Social Development Report, 2009.

⁴⁶ Society for International Development op.cit.

⁴⁷ Ibid.

In regard to population pressure (see table 5 for population estimates), there is much concern about the degree of population pressures in eastern Africa. It is certainly the case that fertility rates remain extremely high: over six children per woman in Somalia, Uganda and DRC. High fertility, especially in rural areas, combined with falling mortality, is resulting in rapid population growth.

Table 5: Population estimates

Country Name	Population 2010	Population 2015
Burundi	8,382,000	9,226,000
Comoros	735,000	832,000
Djibouti	889,000	975,000
DR Congo	73,435,000	75,507,308
Eritrea	5,254,000	6,075,000
Ethiopia	82,950,000	91,940,000
Kenya	40,513,000	46,940,000
Madagascar	20,714,000	23,835,000
Rwanda	10,624,000	12,283,000
Seychelles	87,000	90,000
Somalia	9,331,000	10,590,000
South Sudan	-	-
Uganda	33,424,000	39,075,000
United Republic of Tanzania	44,841,000	52,266,000

Source: World Bank, Population Projection Tables by Country and Group, 2011.

There are, however, contrasting situations within countries. For example, in Ethiopia fertility is substantially higher among rural women than urban women: rural women give birth to nearly three more children during their reproductive years than urban women (5.5 and 2.6, respectively) (Ethiopian DHS, 2011). Despite successful efforts to reduce the birth rate, Kenya is still registering a fast rate of population growth because people live longer. Kenya's population is estimated to reach 75 million people by 2040, even though the average number of children per family has fallen from 8.1 in 1978 to 4.6 in 2008. Madagascar is another example of a country in the subregion that has successfully brought down fertility rates in recent decades (Sharan, 2011:451 as cited in ECA, 2012e). Yet in a few countries – notably Uganda – the fall in fertility has barely begun. As for population density, it would seem that some of the smaller countries in the subregion do indeed face a serious challenge. Rwanda, for instance, is ranked 24 in the world for population density, and the Comoros, 26.⁴⁸ Population per hectare is 406 in Rwanda and 375 in the Comoros, more than 10 times higher than the average for sub-Saharan Africa. In contrast, eastern Africa's most populous country, Ethiopia, has a population density of 79 per hectare.

The other major demographic trend affecting the subregion and changing the parameters for social development is urbanization. Eastern Africa is one of the least urbanized subregions. In 2010, the average percentage of the urbanized population in Eastern Africa was estimated at only 23.7 per cent, compared with 37.3 per cent for the whole of sub-Saharan Africa and the global average of 50.6 per cent. According to the 2011 UN-Habitat report, Burundi had the lowest share of its population living in urban areas in the whole world – just 11 per cent. Although there is a relatively rapid increase in urbanization across eastern Africa, it is forecast that the subregion will remain 'underurbanized' in the coming decades.

Despite the fact that population pressure is being tackled in some countries and urban centres/towns have been developed, this issue should be given top priority in the subregion.

⁴⁸ United Nations Department of Economic and Social Affairs (2011). Rural Population, Development and the Environment.

(b) Health concerns and HIV prevalence

Improving health is central to the MDGs, and the public sector is the main provider of health care in developing countries. To reduce inequities, many countries have emphasized primary health care, including immunization, sanitation, access to safe drinking water, and safe motherhood initiatives. According to the World Health Organization, the adult mortality rate in the subregion is almost twice the global rate.⁴⁹ The causes of this are food insecurity, poverty, conflict and natural disasters. Such levels of adult mortality, which represent the loss of productive and experienced members of society, undermine economic productivity and growth.

If there is a high correlation between the probability of people dying between the ages of 15 and 60 years and their deteriorating health, then access or lack of access to health care services must be responsible. Access and/or lack of access to health care are intimately connected with the level of expenditure on health care services by governments, private operators and international donors. Table 6 shows the different levels of health expenditure in the subregion. Non-government expenditure on health includes both health donor aid and private spending on health. Combined government and non-government per capita expenditure on health is six times less than per capita expenditure at the global level.

Throughout eastern Africa, the HIV and AIDS pandemic has resulted in shortened lifespans, increasing numbers of orphans, fewer people in the age cohort that can support both the older and younger dependent populations, as well as changes in household size and household structure. Workers affected include both males and females, and particularly those who have advanced education or technical training. Rural and urban areas have not shown the same patterns of changes, especially with regard to gender roles. Poverty, minimal health facilities and lack of education have all been blamed for the ongoing changes. Government policies hampered initial efforts to confront the epidemic, so varying amounts of time were lost in responding and the pandemic was not contained as rapidly as it might have been. Some of the changes in household composition and cultural practices observed are directly attributable to increased mortality and morbidity, while others have grown out of increasing global connectedness, both in communication and transportation, as modernization, with increasing urbanization and industrialization, has begun to spread throughout less developed areas. However, HIV and AIDS remain a major threat to health in the subregion because of the limited use of condoms, limited awareness and cultural-related reluctance. The threat of malaria persists mainly due to the expansion of the malaria belt to new areas that were previously free of the disease.⁵⁰ The subregion has a shortage of health workers, especially physicians. Only Seychelles has 15 physicians per 10,000 inhabitants, and therefore reaches the world physicians density of 14 physicians per 10,000 inhabitants. Most countries have a physician density of 0.5 or one.

In their respective poverty reduction strategies, countries in Eastern Africa have prioritized and emphasized the provision of better health facilities. The main goal in all countries is to increase access to health significantly, particularly for the poor, to improve the quality of health care and make the system more equitable. The budget allocation for the health sector in the subregion has been increasing significantly. For example, budget allocations in Djibouti increased from 7.1 per cent in 2004 to 10 per cent in 2006; in Rwanda public health expenditure as a proportion of the total budget increased from 10.2 per cent in 2010 to 11.5 per cent in 2011. In Kenya, public health expenditure increased from 5.2 per cent in 2010 to 5.9 per cent in 2011, while in Burundi, it increased from 7.4 per cent in 2010 to 7.8 per cent in 2011.⁵¹ In Uganda, although the government contribution to the health sector has increased for the budget year 2013/2014, it hardly matches growing population needs. In the financial year 2013/2014, the Government allocated only 8.7 per cent of the budget to the health sector, up from 7.8 per cent the previous financial year, but this is still below the 15 per cent commitment in the 2001 Abuja declaration.

Despite all these achievements in government expenditure on health, the health situation is still alarming. Although some indicators are improving, they have not yet reached acceptable levels, thus raising serious questions about the ability of countries in the subregion to achieve the health-related MDGs by 2015. It

⁴⁹ World Health Organization (2011). Global Health Observatory Data Repository.

⁵⁰ ECA, 2012 Tracking progress on macroeconomic and social development in eastern Africa.

⁵¹ Society for International Development op. cit.

In eastern Africa, only two countries, Kenya and Seychelles, had adult and youth literacy in the range of average global adult and youth literacy. The lowest literacy rates are in sub-Saharan Africa,⁵³ where less than half of the adult population is literate, the percentage in Ethiopia being 36 per cent. Thus, many children, youth and adults in the subregion lack the basic skills needed to cope with the many socioeconomic challenges of life. The consequences of illiteracy are many and harmful for the individual and society. An illiterate population has limited capability to obtain and comprehend essential information and this restricts development, especially in rural areas. The illiterate are more likely to have limited professional skills, lower quality jobs, lower wages and incomes, and to be unemployed and living in poverty. Literacy facilitates access to the professional skills and knowledge that help people to compete in the national or global economy. Illiteracy results in low community involvement and civic participation.

Despite laws and policies to empower women and promote equal access to education, health, and economic and political power, gender inequality persists. Violence and discrimination against women and girls continue, especially during the recurrent wars and conflicts in the subregion. Women in many parts of Africa are denied equal access to and control over resources. Therefore, both illiteracy and low women's empowerment levels have affected the development of the majority of countries in the subregion. With low levels of education, people continue to be engaged in primitive agricultural activities, rather than other non-agricultural income-generating activities in small and medium-sized enterprises. Employment is also affected as there are insufficient qualified staff for large enterprises that require skills to compete in subregional markets.

Adult literacy rates in the subregion vary from country to country. The adult literacy rate is the rate at which adults admit to knowing how to read and write. Kenya and Seychelles lead the subregion with the highest adult literacy rates, ranging from 80–89 per cent and 90–100 per cent respectively. The Comoros, Djibouti, Madagascar, Rwanda, Uganda and United Republic of Tanzania have adult literacy rates ranging from 70 to 79 per cent, while the rate in the remaining countries is below 50 per cent.

The youth literacy rate is more encouraging and has improved (UNESCO, 2012). With the exception of DRC, Somalia and South Sudan, all countries in the subregion have youth literacy rates of at least 70 per cent. This is mainly the result of increasing rates of primary school enrolment. Burundi had the highest primary school gross enrolment rates in the subregion, with 135 per cent in 2009. What was remarkable in Burundi is the significant jump that occurred between 2002 and 2009, from 71 per cent to 135 per cent. However, the differences between primary and secondary school enrolment rates are quite striking. In 2009, Kenya had the highest secondary school gross enrolment rates of 45 per cent, much lower than its primary school gross enrolment rate of 110 per cent.⁵⁵

A working paper produced by the Centre for Global Development found that, despite empirical evidence suggesting that user fees significantly deter public service utilization in developing countries, this was not apparent in Kenya. The study found that the nationwide abolition of public school fees in Kenya in 2003 led to no increase in net public enrolment rates but rather a dramatic shift towards private schooling, thus affecting the quality of education for the majority of the poor who may not be able to afford private schools.

However, in other countries in the subregion, “free” primary education increased the primary gross enrolment rate, as indicated in table 7, thus boosting youth literacy rates. The main challenge is maintaining enrolment at secondary level and in tertiary institutions. This mainly affects poor girls, who end up marrying younger, especially in the rural areas where the main economic activity is agriculture. Education and illiteracy levels therefore constitute a challenge for sustainable development in nearly all countries in the subregion.

53 Ibid.

54 Society for International Development, *op. cit.*

55 Ibid. The literacy rate may be greater than 100 per cent when students younger or older than the theoretical or official school age are concerned because of early or late entrance, and grade repetition.

Table 7: Adult literacy rates and inequality indicators in the Eastern Africa subregion

Country	Adult literacy rate (% in 2011)	Youth literacy rate (% in 2011)	Country policy and institutional assessment, gender equality rating (1=low to 6=high)
Burundi	60 to 69	70 to 79	4.0
Comoros	70 to 79	80 to 89	2.5
Djibouti	70 to 79	80 to 89	3.0
DRC	Less than 50	50 to-59	-
Eritrea	60 to 69	70 to 79	3.5
Ethiopia	Less than 50	50to 59	3.0
Kenya	80 to 89	90 to 100	3.5
Madagascar	70 to 79	80% to 89%	3.5
Rwanda	70 to 79	80 to 89%	4.0
Seychelles	90 to 100	90 to 100	-
Somalia	Less than 50%	Less than 50	-
South Sudan	Less than 50	Less than 50	-
Uganda	70 to 79	80 to 89	3.5
United Republic of Tanzania	70 to 79	80 to 89	3.5

Source: UNESCO, 2012, and World Bank, 2012.

2.2.3 Environmental and natural resources management: priority challenges

Environmental problems are a major challenge for Africa in the twenty-first century. They affect progress in development and living conditions, especially of poor households in rural and urban areas alike. Households in the subregion rely heavily on natural resources as a basis for farming, fishing, energy production and housing. As a result of overreliance on direct use of natural resources, coupled with unsustainable use and extraction practices, the subregion has experienced an alarming rate of degradation and depletion of its natural resources. This demands policy and strategic actions to reverse the trend. The challenge therefore is not only to halt this negative trend, but also to develop sustainable environmental management practices to boost poverty reduction and contribute to achieving economic growth objectives.

(a) Water and sanitation

Despite the higher percentage of the population with access to improved water sources in eastern Africa, in 2010, some 58 per cent of the population had no access to potable water, while only about 32 per cent of people had access to improved sanitation facilities (table 8). With regard to improved water sources, the Comoros led the region with 95 per cent, followed by Burundi and Uganda with 72 per cent, but in the remaining countries the proportion was below 70 per cent and as low as 29 per cent in Somalia. Drinking unsafe water increases the threat of waterborne infections such as diarrhoea that kill about 1.5 million children under five years globally every year, mostly in least developed countries.⁵⁶ This means that access to improved water sources is still a challenge and should be given priority. Improving sanitation facilities remains a challenge for all countries in the subregion. Priorities in the health sector should focus on providing the population with access to clean drinking water and adequate sanitation facilities.

⁵⁶ UNICEF/WHO, 2009.

Table 8: Population with access to water and sanitation facilities

Country	Population with access to an improved water source (% in 2010)	Population with access to improved sanitation facilities (% in 2010)
Burundi	72	46
Comoros	95	36
Djibouti	-	50
DRC	45	24
Eritrea	-	-
Ethiopia	44	31
Kenya	59	32
Madagascar	46	15
Rwanda	65	55
Seychelles	-	-
Somalia	29	23
South Sudan	-	-
Uganda	72	34
United Republic of Tanzania	53	10
Subregion*	58	32

Source: WHO/UNICEF, a snapshot of drinking water and sanitation, 2012 (*An average of countries with data).

(b) Air pollution

In 1964, the WHO Expert Committee on Atmospheric Pollutants approved the basic conclusions of a WHO Inter-Regional Symposium on Criteria for Air Quality and Methods of Measurement and suggested as guides to air quality four categories of concentrations and exposure times, and corresponding effects.⁵⁷ In Africa, air quality is generally affected by emissions from vehicles and industry. Air pollution is currently not seen as a serious problem because there is insufficient data on the extent/impact of air pollution on human health and the environment.

However, the limited data available on air quality in eastern Africa show that episodes of air pollution are becoming frequent across the subregion and it is a growing problem in both rural and urban areas. The increase in urban air pollution is proportionate to the increase in the combustion of fossil fuels for industrial processes and transportation. Air pollution results from gases (carbon monoxide, nitrogen dioxide, sulphur dioxide, benzene and ozone) or particulates (dust). These may cause respiratory impairment if inhaled over a long period. The major sources of air pollution in the subregion are the following:

- (i) The growing transport sector – 40 per cent of vehicles imported are either second-hand or reconditioned.
- (ii) Manufacturing industries (cement, steel mills, etc.).
- (iii) Agricultural and livestock activities – pesticides, machinery, manure.
- (iv) Mining activities (gaseous emissions, dust).
- (v) Poor waste disposal (open burning, incineration) – 60 per cent of solid waste is burnt/buried.
- (vi) Biomass burning – fuel wood accounts for >90 per cent of the energy consumed - indoor air pollution.

⁵⁷ WHO Annual Report, 1964.

(vii) Energy production – thermal power plants.

(viii) Forest/bush fires.

Measures to regulate air pollution, especially in urban centres and industrial areas, should be a priority. Priority should also be accorded to the mobilization of new and additional resources, along with a reallocation of capital from activities that generate air pollution and increase environmental risks to areas that can stimulate sustainable growth and create employment.

(c) Climate change

Africa has contributed the least to greenhouse gas emissions, widely held responsible for global warming, but the continent, and in particular Eastern Africa, is vulnerable to the impacts of climate change, as a result of poverty, which constrains the ability to adapt. Climate change is anticipated to have devastating impacts in the subregion, some of which result from climate-associated extreme events already reported. Recurrent drought is reported in Ethiopia, Eritrea and Djibouti, and flooding in Uganda, Rwanda and United Republic of Tanzania, which have affected millions of people.⁵⁸ In 2011, some 13 million people in Djibouti, Eritrea, Ethiopia, Kenya and Somalia experienced one of the worst humanitarian crises in decades: the region's most severe drought in 60 years caused widespread starvation and made access to clean water and sanitation extremely difficult.⁵⁹

Vulnerability to drought is accentuated by aridity. Sixty per cent of the total land area of the Eastern Africa subregion is classified as arid (less than 500 mm of rainfall annually). This makes rainfall the most important climatic factor in the subregion. The rainfall is low, unreliable and unevenly distributed and, although there have always been cycles of drought and flooding, there is evidence to suggest that the climate is becoming more unstable and the weather effects more devastating.

Rainfall in eastern Africa is bimodal but is characterized by uncertainty both spatially and temporally. The 1998 El Niño produced an estimated five-fold increase in rainfall, for example (Galvin and others, 2001). On the other hand, 1997 was a drought year, while the 1999 drought was estimated to be one of the worst on record (WFP, 2000). Eastern Africa is home to thousands of pastoralists who tend to their livestock in the semi-arid to arid areas of the subregion. Seasonal rainfall affects the availability of forage, livestock production and ultimately the livelihoods of these people.

Other climate analyses suggest that there will be highly differential impacts of climate change in eastern Africa to the middle of the twenty-first century. Parts of eastern Africa will become drier, with a considerable reduction in the length of the growing season. Other areas, including southern Kenya and northern United Republic of Tanzania, may become wetter, with increases in the length of the growing season (Thornton et al., 2002). Such changes will inevitably fundamentally alter ecosystem structure and function. These in turn will affect land-use and livelihoods and have the potential to make populations more vulnerable.

In small-island development states, warming of the ocean surface has already been detected, and this trend is expected to continue. Projections show that this warming will be accompanied by an increase in heavy rainfall events and other temporal and spatial changes in precipitation patterns, and by more intense or frequent cyclones/hurricanes. Arable land, water resources and biodiversity are already under pressure from population increase and the unsustainable use of available natural resources. It is predicted that climate change will have negative impacts on agriculture, while coral reefs will be threatened by increased sea surface temperatures and acidification of the oceans. In addition, mangroves will be threatened by sea level rise and an increase in extreme weather events. Water-related stress is expected to increase due to changes in precipitation patterns.

⁵⁸ Society for International Development, *op. cit.*

⁵⁹ UNEP Year Book 2012: Emerging Issues.

(d) Natural disasters

The subregion is increasingly exposed to natural disasters, including food crises, flooding, drought, landslides, etc. Disasters destroy human lives, animals, crops, infrastructure, property and biodiversity, and this has grave consequences for social and economic development. Disaster unpreparedness can have serious consequences, especially regarding the protection and preservation of human lives, and property. According to Rupp, disaster unpreparedness manifests in many ways, including: (i) inadequate financial means allocated to disaster preparedness planning; (ii) too much focus on drought and flooding at the expense of smaller disasters; (iii) few incentives to promote disaster prevention activities; (iv) limited consideration and planning for the long-term negative effects on economic growth and development. Nevertheless, given regular exposure to natural disasters and the risk to human lives and property, the measures taken by eastern African countries to enhance disaster management preparedness, at least to improve coordination and effectiveness of responses, both nationally and locally are still insufficient.

Five islands in the Indian Ocean – the Union of the Comoros, Madagascar, Mauritius, Seychelles and Zanzibar (United Republic of Tanzania), are working to establish and manage disaster loss databases that will be able to predict and estimate losses from cyclones, floods and storm surges. The project is supported by the United Nations Office for Disaster Risk Reduction (UNISDR) and the Indian Ocean Commission (IOC) ISLANDS Project (UN_SPIDER, 2013). These islands are of special interest from a sustainable development and environmental point of view. They are particularly vulnerable to natural disasters (such as cyclones, tsunamis, drought and floods), the frontline of climate change, and are threatened with rapid loss of marine and terrestrial biodiversity. These environmental and economic vulnerabilities were widely demonstrated and recognized by the international community following the 1992 Earth Summit, and confirmed by the Barbados Action Programme in 1994 and the Mauritius Strategy in 2005.⁶⁰

(e) Land degradation and desertification

In addition to the challenges of persistent poverty and unemployment, the countries of the subregion are confronted with threats to the resource base of many productive sectors resulting from environmental degradation, including deforestation, soil erosion, desertification, loss of biodiversity, depletion of fish stocks and the effects of climate change. These challenges also represent opportunities for change, however.⁶¹

Small farms of less than two hectares occupy 60 per cent of arable land worldwide, constitute 90 per cent of the world's 525 million farms and contribute substantially to global farm production. In Africa, 90 per cent of agricultural production is derived from small farms.⁶² Africa's land is arable and permanent cropland, and its geographical stability has resulted in a high proportion of low fertility soils. In the absence of volcanic rejuvenation, cycles of weathering, erosion and leaching have over the years left soils inherently low in nutrients. While excessive erosion remains a general cause of land degradation, some countries in the subregion, including Djibouti, Somalia, Kenya, Ethiopia and Uganda, suffered from unprecedented levels of severe droughts and desertification from mid-2011 to mid-2012. Land degradation has not only resulted in decreased agricultural productivity and unplanned massive population movements, but also unprecedented climatic factors such as drought (ECA, 2011).

The Horn of Africa countries (Djibouti, Eritrea, Ethiopia, Kenya and Somalia) have large tracts of drylands. Unless mitigating measures are taken, dryland areas and desertification will increase as a result of climate change. Desertification will entail increased land degradation, decreased farming productivity and crops, loss of biodiversity, and spontaneous population migrations, all of which undermine economic growth and sustainable development. Efforts to improve soil fertility are needed, though it is recognized that no single approach is sufficient. Many farmers have developed soil management strategies to cope with the poor quality of their soil. However, low inputs of nutrients, including organic matter, contribute to poor crop growth and the depletion of soil nutrients.⁶³ Priority should therefore be given to mitigating desertification and land degradation, especially in rural areas where agriculture is the predominant economic activity.

⁶⁰ <http://www.uncsd2012.org/content/documents/959seychelles.pdf>.

⁶¹ UNESCO, Adult and Youth Literacy Rates, 2012.

⁶² McIntyre and others, 2009.

⁶³ Ibid.

(f) Deforestation

Rainforests are home to an estimated 50 per cent of the world's terrestrial species, making them an extensive library of biological and genetic resources. In addition, rainforests help maintain the climate by regulating atmospheric gases and stabilizing rainfall, protect against desertification, and provide numerous other ecological functions. However, these precious systems are among the most threatened on the planet. Although the precise area is debated, each day at least 80,000 acres (32,300 ha) of forest disappear worldwide. At least another 80,000 acres (32,300 ha) of forest are degraded. Along with them, the planet loses untold numbers of species to extinction, the vast majority of which have never been documented by science. As forest coverage shrinks, more carbon is added to the atmosphere, climatic conditions are further altered, and more topsoil is lost to erosion.

Between 1990 and 2005, the subregion lost at least 20,588,000 ha of forest or 1,029,400 ha of forest every year, about four times the global average deforestation rate, and total forest areas decreased at a high rate. For example, the total forest area in the Comoros of 120 square kilometres gradually reduced to 80 in 2000, then to 50 square kilometres in 2005 – a loss of 70 square kilometres (more than 50 per cent) in only fifteen years. Similarly, Burundi had 2,890 square kilometres of forest coverage, which had fallen to 1,980 square kilometres by 2005. The only country in the subregion to increase its forest coverage is Rwanda, at an annual rate of 6.9 between 2000 and 2005, while Djibouti and Seychelles have maintained their forest coverage since 2000. The rest of the countries in the subregion have negative/decreasing rates in forest coverage.

The immediate causes of deforestation include clearing by households or companies for agriculture, housing and urbanization, and gathering firewood as a source of cooking energy. Its effects are devastating: reduced rainfall, species loss and threat to biodiversity, carbon and greenhouse gas emissions that contribute to global warming and climate change, and increased flooding and soil erosion (ECA, 2011). All of these factors have adverse effects on local economies. It is therefore important for countries to prioritize afforestation programmes.

The predominant source of energy in the Eastern Africa subregion is biomass, mainly firewood and charcoal. The widespread use of firewood and charcoal as leading sources of energy is exacerbating land degradation and reducing agricultural productivity. The current subregional picture is one of increasing scarcity of biomass energy.

The subregion enjoys regular solar radiation throughout the year so there is substantial potential for the development of solar energy. For example, the potential for solar energy in Kenya is estimated at 4 to 6 kWh per m² per day of insolation, which is equivalent to about 250 million tonnes of oil per day. Yet, there is virtually no large-scale, commercial production of energy from solar radiation in the subregion.⁶⁴ Kenya is the first African country to tap geothermal power to a significant extent. On the other hand, the geothermal potential of Ethiopia has been estimated at about 4,000 MW. Some of the geothermal reservoirs identified so far are thought to straddle national boundaries.

Oil and gas are another source of energy in the subregion. South Sudan is a current producer, while Uganda and Kenya have announced the discovery of oil and gas deposits of commercial quantities. Offshore exploration for oil and gas is ongoing in Djibouti, Eritrea, Kenya and Somalia. Significant discoveries of oil and gas in the subregion are likely to have profound effects on the economy, environment, and peace and security. The tools required to harness oil and gas sustainably need to be developed.

64 Society for International Development op. cit.

Table 9: Desertification indicators in the Eastern Africa subregion

Country / Area	Total area	Total forest area	Forest cover	Other wooded land	Total forest area	Total forest area	Annual change rate	Annual change rate	Primary forest	Annual Loss of primary forest
	sq km	2005 sq km	2005 % of land	2005 sq km	1990 sq km	2000 sq km	1990-2000 %/yr	2000-2005 %/yr	2005 % total forest	2000-2005 %/yr
Comoros	1,860	50	2.9	N/A	120	80	-4	-7.4	0	N/A
Kenya	580,370	35,220	6.2	349,200	37,080	35,820	-0.3	-0.3	20	-0.3
Madagascar	587,040	128,380	22.1	170,540	136,920	130,230	-0.5	-0.3	80.6	-0.1
Seychelles	450	400	88.9	N/A	400	400	0	0	5	0
Swaziland	17,360	5,410	31.5	2,890	4,720	5,180	0.9	0.9	-	N/A
Uganda	241,040	36,270	18.4	11,500	49,240	40,590	-1.9	-2.2	-	N/A
United Republic of Tanzania	945,090	352,570	39.9	47,560	414,410	373,180	-1	-1.1	-	N/A
Djibouti	23,200	60	0.2	2,200	60	60	0	0	-	N/A
Eritrea	117,600	15,540	15.4	72,570	16,210	15,760	-0.3	-0.3	-	N/A
Ethiopia	1,104,300	130,000	11.9	446,500	151,140	137,050	-1	-1.1	-	N/A
Somalia	637,660	71,310	11.4	N/A	82,820	75,150	-1	-1	-	N/A
Burundi	27,830	1,520	5.9	7,220	2,890	1,980	-3.7	-5.2	0	N/A
DRC	2,344,860	1,336,100	58.9	832,770	1,405,310	1,362,070	-0.4	-0.2	-	N/A
Rwanda	26,340	4,800	19.5	610	3,180	3,440	0.8	6.9	0	N/A

Source: Food and Agriculture Organization: The State of the World's Forests 2007. (g) Energy sources

Table 10 shows that a high proportion of the population in the subregion relies on firewood for cooking, while other sources of energy are inaccessible, especially in rural areas. Apart from Djibouti, where only 3.7 per cent of the population uses wood fuel for cooking, in most countries more than 50 per cent of the population uses wood fuel. Use of electricity for cooking is still below one per cent for all countries except DRC (4.6 per cent). In DRC, Madagascar, United Republic of Tanzania and Uganda, the consumption of charcoal as a source of fuel for cooking is increasing rapidly.

Table 10: Use of energy for cooking in the Eastern Africa subregion

Countries	Fuels used for cooking - % of the total population							
	Electricity	Gas	Kerosene	Charcoal	Wood	Dung	Coal	Other
Burundi	0.1	0.2	0	5.1	94.2	-	0.2	0.2
Comoros	0.1	2.3	22.2	0.7	74.6	-	-	0.2
Djibouti	0.6	4.9	80.6	8.7	3.7	-	-	1.5
DRC	4.6	-	0.1	28.9	66.2	-	-	0.2
Eritrea	0.6	4.7	28	1.7	59.4	5.2	-	0.4
Ethiopia	0.2	0.1	3.9	2.8	85	7.4	-	0.6
Kenya	0.6	3.5	13.2	13.3	68.7	-	-	0.7
Madagascar	0.2	0.3	0.1	17.4	81.7	-	-	0.3
Rwanda	0.1	0	0.1	6.5	92.1	0.2	0.3	0.7
Seychelles	-	-	-	-	-	-	-	-
Somalia	-	-	-	-	-	-	-	-
South Sudan	-	-	-	-	-	-	-	-
Uganda	0	0.1	0.3	13	85.8	-	-	0.8
United Republic of Tanzania	0.3	0.2	2.3	19	77.6	0	-	0.5

Source: WHO, Global Health Observatory Data Repository, 2011.

Access to electricity in the subregion is still low, especially in rural areas, and the overall distribution at national level also needs more effort (table 11). For example, in 2008, while 15.3 per cent of Ethiopia's total population had access electricity, access in urban areas was 80 per cent compared to only two per cent in rural areas. While overall access to electricity in the subregion is still low, in South Sudan it is only one per cent, the lowest in the subregion.⁶⁵ At present, the country has started initiating projects for more hydropower electricity, including the one to be built near the Ugandan border, which will have the capacity to generate 890 MW, a massive increase compared to the current consumption level. Therefore, it is evident that South Sudan still needs more energy sources apart from hydropower and it is a priority in their strategic plan. Energy provides a foundation for growth, providing a basis on which other sectors can develop.

⁶⁵ ECA, Energy access and Energy Security, 2012.

Table 11: Access to electricity in the Eastern Africa subregion

	Countries	% of population with electricity						Source (s)
		National	Year	Rural	Year	Urban	Year	
1	Burundi	2.8	2006	0.1	2006	25.6	2006	African Development Bank Group, 2007
2	Comoros	40.1	2004	-	-	-	-	Lachaud J.P., 2005
3	Djibouti	49.7	2004	10.2	2004	56.9	2004	MDGR, 2005; PRSP, 2004. Estimate
4	DRC	11.1	2008	25	2008	4	2008	IEA, 2009
5	Eritrea	32	2008	5	2008	86	2008	National Statistics and Evaluation Office and ORC Macro, 2003
6	Ethiopia	15.3	2008	2	2008	80	2008	Central Statistics Agency and ORC Macro 2006
7	Kenya	15	2008	5	2008	51.3	2008	IEA, 2009
8	Madagascar	19	2008	5	2008	53	2008	IEA, 2009
9	Rwanda	16	2005	1.3	2005	25.1	2005	National Institute of Statistics and ORC Macro 2006
10	Seychelles	96	2002					Seychelles National Statistics Bureau, 2007
11	Somalia	-	-	-	-	-	-	
12	South Sudan	-	-	-	-	-	-	
13	Uganda	9	2008	4	2008	42.5	2008	IEA, 2009
14	United Republic of Tanzania	11.5	2008	2	2008	39	2008	IEA, 2009

Source: WHO and UNDP, 2009.

Ensuring access to energy is arguably one of the major challenges the world faces today. For those living in extreme poverty, lack of access to energy services dramatically affects and undermines health, limits opportunities for education and development, and can reduce a family's potential to emerge from poverty. The problem of energy access for the poor has become even more acute because of increased vulnerability to climate change, the global financial crisis and volatile energy prices.⁶⁶

Energy is therefore a priority issue for sustainable development in eastern Africa. For example, Ethiopia has embarked on a massive hydropower project that will lead to a substantial increase in energy capacity that will make it an energy export centre for the subregion. Furthermore, governments in the subregion should regulate the exploitation of forests, devise mechanisms for the charcoal trade and put in place long-term plans for sustainable production. There is also an urgent need to look at alternative sources of energy. With respect to other renewable energy sources, the subregion needs huge investments in research and to advance the development of geothermal power options.

(h) Marine pollution

Small Island Developing States (SIDS) face the constant threat of marine pollution. For example, more than 30 per cent of the world's petroleum transits through the Indian Ocean. Maritime piracy is another major threat to the future of islands, jeopardizing repeated efforts to promote the integration of island States into the global economy. Challenges such as these are cross-border issues that call for subregional and international solutions. For the last 28 years, the Indian Ocean Commission has provided a coordinated, efficient and well-balanced platform for effective cooperation to meet the challenges of

⁶⁶ WHO and UNDP, 2009.

sustainable development. It is important to advocate for the specific vulnerability of the eastern African islands in light of the significant, emerging challenges they face. The specific characteristics of these islands are an asset for tourism and biodiversity but are also factors in their vulnerability to external shocks and dependency. This vulnerability and dependency justify support from subregional organizations.

(i) Consequences of high population and rapid and unplanned urbanization

Environmental challenges in eastern Africa are further aggravated by high population growth and rapid and unplanned urbanization. The subregion's population has grown by more than 24 million since 2005. High population growth increases pressure on the environment through, among others, encroachment on natural forest, as in Gishwati in Rwanda,⁶⁷ and extension of agricultural activities to important swamp and mountain ecosystems. To compound the problem, the subregion is experiencing a high rate of urbanization without any related planning. For example, Kampala, the capital of Uganda, is one of the fastest growing cities in Africa (Hirabe, 2009) but its growth is largely organic. If rapid, unplanned urbanization continues, it will have a serious negative impact on the environment through, among others, poor waste disposal, air pollution, and degradation of adjacent ecosystems through urban sprawl. When coupled with poverty, high population growth and rapid, unplanned urbanization lead to unsustainable exploitation of natural resources.

Other direct consequences of environmental degradation in the subregion, specifically in Rwanda, Uganda, Burundi and Democratic Republic of Congo, include:

- (i) Degradation of farm land;
- (ii) Depletion of natural habitat for aquatic and land animals;
- (iii) Decline in biological diversity (the variety of all life on earth, the complex relationships between living things, and the relationships between living things and their environment);
- (iv) Aquatic pollution, adversely affecting the livelihood of fishing communities and destroying fish and other water creatures;
- (v) Land pollution, adversely affecting the livelihood of farming communities.

2.2.4 Governance, peace and security

Eastern African countries have registered considerable progress in establishing democratic governance systems, including through holding regular elections. However, insecurity concerns remain, with more effort needed to consolidate good governance and build lasting peace in the subregion.

Africa's regional efforts to promote good governance, peace and security have great implications for eastern Africa. Thus, the transformation of the OAU into the AU in 2002 brought new hope for eastern Africa and the entire continent to maintain peace, security and stability. The efforts of African organizations have led to the rebirth of the concept of African ownership and strengthened the principle of African solutions to African problems. However, the concept needs to be strengthened by a strong political will. Increased relations between African States are needed to raise the standards of the African people and maintain peace and security. Implementing a peace and security policy is a challenging task for African organizations because of the many internal and external challenges. These include poverty, unemployment, disasters, and mismanagement, ideological divisions between States, and external actors' economic and political interests in Africa. By bridging continent-wide gaps, subregional bodies and initiatives in eastern Africa play a critical role in promoting good governance, peace and security in eastern Africa.

⁶⁷ Ministry of Finance and Economic Planning. Undated (Republic of Rwanda).

The Intergovernmental Authority on Development (IGAD), of which seven eastern African countries are members, is a major organ for subregional security and political dialogue in the Horn of Africa⁶⁸. IGAD has led and participated in regional and international forums to promote peace and security in the subregion. For example, it supported the introduction of judicial measures to control piracy in Seychelles and Mauritius. It has also conducted a regional workshop to discuss piracy and maritime security in eastern and southern Africa and the Indian Ocean subregion. Furthermore, IGAD has established a liaison office in Juba, South Sudan to assist in creating conditions for peaceful referenda and post-referenda processes. IGAD harmonizes its activities with those of the African Union and by so doing has contributed significantly to the implementation of the continental framework on peace and security.

The International Conference on the Great Lakes Region (ICGLR), otherwise known as the Conference, is composed of 11 member States,⁶⁹ six of which are eastern African countries. At its first Summit in Dar es Salaam, United Republic of Tanzania, on 20 November 2004, the Conference adopted a Declaration, followed two years later by a Pact on Peace, Security, Democracy and Development in the Great Lakes Region. The Pact aims, among others, to implement the Declaration and to “Create the conditions for security, stability, and sustainable development between the member States”. ICGLR has also created a Special Fund for Reconstruction and Development (SFRD) as the principal financing mechanism for the realization of the Pact. The ICGLR Secretariat, with various supports, has organized a number of round table conferences.

Moreover, the East African Community Partner States agree that peace and security are pre-requisites of social and economic development within the Community and vital to the achievement of its objectives. In this regard, the Partner States agree to foster and maintain an atmosphere conducive to peace and security through cooperation and consultation on issues pertaining to the peace and security of the Partner States with a view to prevention, better management and resolution of disputes and conflicts between them.

There are also country-level efforts to ensure peace and security in the subregion, including combating piracy and resolving conflicts. Djibouti has made its land and port facilities available to foreign partners, including the United States, Japan and the European Union, to combat piracy in the Gulf of Aden. Piracy has cut the Seychelles’ fishing output by 50 per cent and its tourism by 23 per cent. Seychelles has now amended its Penal Code to allow for prosecution of pirates, including those captured by European Union naval forces outside Seychelles waters.⁷¹ Efforts to combat piracy are yielding results. Between 2011 and 2012, the number of pirate attacks in eastern Africa fell from 237 to 75.⁷² The decrease is attributed to increased naval patrols and capacity, and the adoption by ships of appropriate practices for passage through these sea lanes. According to the Institute of Security Studies, the other side of this coin is the danger that the success of patrols off Somalia might lead groups too wary to sail out into the open ocean to introduce rackets targeting defenceless local fishermen.

Moreover the most notable counter-piracy efforts remain focused on deterrence. There needs to be a shift to peace-building efforts that will contribute to sustainable economic development for communities that might otherwise fall victim to, or even become engaged in, piracy.⁷³ The African Union (AU) and regional economic communities (RECs) have a big role to play here. Initiatives such as the Djibouti Code of Conduct and REC maritime security strategies need to be supported.

A number of African countries have also maintained peace-keeping troops in unstable areas, including Somalia, thus contributing to international peace-keeping efforts in the subregion.

68 Seven of the eight member States are Eastern African countries, namely, Djibouti, Eritrea, Ethiopia, Kenya, Somalia, South Sudan and Uganda. The other is the Sudan.

69 Angola, Burundi, Central African Republic, Republic of Congo, Democratic Republic of Congo, Kenya, Rwanda, the Sudan, Uganda, United Republic of Tanzania and Zambia.

70 EAC, Treaty for the establishment of the East African Community, 1999.

71 Eastern Africa Integration Strategy Paper, 2011.

72 <http://www.issafrica.org/iss-today/african-coastal-piracy-in-2013-the-beginning-of-the-end-or-the-end-of-the-beginning>.

73 Ibid.

Despite considerable efforts at the subregional and national levels to ensure good governance, peace and security in eastern Africa, instability remains. Over the last decade, some countries have been plagued by civil wars, cross-border conflicts, social strife, and arms trafficking. Furthermore, democracy remains fragile in some countries. Major security concerns that have featured in recent AU, EAC and IGAD meetings include: persistent conflict in Somalia; piracy off the coast of Somalia and in the Gulf of Aden that in 2009 constituted more than 50 per cent of worldwide piracy incidents; and outstanding post-referendum issues in the Sudan and South Sudan, including border delimitation and the status of Abyei, posing a security challenge for the countries and the subregion. They also include conflicts in Democratic Republic of Congo and piracy disrupting fishing in the Indian Ocean, especially in Mauritius, Somalia and Seychelles. Drought, famine and dwindling resources, including grazing land, also trigger disputes.

Besides curtailing national economic and social progress, insecurity and political instability are serious obstacles to effective and deeper integration needed to foster sustainable development in the subregion. Conflicts consume resources that could otherwise be channelled into productive activities. Considerable efforts and country-level commitments are needed to consolidate good governance and build lasting peace in the subregion. Collaborative efforts leading to detente and ultimate resolution of conflicts would strengthen regional integration processes and enable countries and people to focus on development in a sustainable manner.

2.2.5 Summary of sustainable development challenges in the subregion

Economic challenges in the subregion include inequitable economic growth and inequality, high poverty and unemployment rates, and high dependency on natural resources. They also include inadequate infrastructure and sustainable energy supply, aggravated by volatile energy prices. Eastern Africa also faces social challenges, including high population pressure, food insecurity and persistent hunger, high illiteracy rates, poor health services and prevalence of diseases such as HIV/AIDS. In addition, the subregion faces environmental challenges which include: biodiversity loss; the degradation of ecosystems, including marine ecosystems; inefficient and wasteful patterns of consumption and production; and successive natural disasters. The subregion also faces governance, peace and security challenges, include civil wars, cross-border conflicts, social strife, piracy, and arms trafficking, as well as fragile democracies. The many challenges justify review of economic policies, including patterns of production, distribution and consumption within a framework of sustainable development. Table 12 provides a snapshot of the main sustainable development challenges, their causes and implications. The issues are interrelated, with direct or indirect consequences on each other.

Table 12: Sustainable development challenges and their implications

N°	Sustainable development challenge	Main causes	Implications and linkages with other sustainable development challenges
Economic sustainability			
1	High poverty levels	High population growth rates estimated at 2.5 per cent annually; environmental factors, including land degradation, limited range of economic activities	High disease burden and poor health; low productivity, including in agriculture; food insecurity and poor nutrition; inability to afford and access adequate social services
2	High unemployment rates	Inadequate access by many people to social services such as education and health estimated at more than 40 per cent	Poor productivity of population; inadequate access to basic needs; vulnerability to crime; rural-urban migration
3	Inequitable economic growth and inequality	Predominance of agriculture; inadequate off-farm activities; high population pressures;	Depletion and degradation of natural resources; environmental challenges; increased poverty levels
Social sustainability			
4	High population growth	High fertility rates; poor accessibility to family planning services; high poverty levels	Pressure on and degradation of natural and other resources; low productivity levels; production focus on subsistence
5	Poor health and prevalence of diseases such as HIV/AIDS	Inadequate access to and poor health facilities and services; poor nutrition; environmental degradation; low budget allocations; cultural values	High child and maternal mortality; low productivity and poor economic performance
6	High illiteracy rates	High rates of secondary-school drop-outs; low ratio of girls to boys enrolment in higher institutions of learning	Persistent unemployment; lower wages and income; poverty; slow growth levels; women's inadequate access to resources such as land and inequitable growth
7	Food insecurity and persistent hunger	Population growth rates (2.5 per cent); land degradation and loss of soil fertility; inadequate access to appropriate farm technologies; natural calamities such as floods and drought	Poverty cycles; poor health and childcare; land degradation; food price volatility; conflicts
Environmental sustainability			
8	Unsafe water and poor sanitation	Inadequate water supply and sanitation facilities, and limited infrastructure	Water-borne diseases and poor health
9	Air pollution	Unregulated emissions from industrial establishments; emissions from other sources; use of poor technologies	Climate change; non-communicable diseases
10	Negative impacts of climate change, including drought, flooding and landslides	Lack of preparedness and limited capacity to adapt	Disruptions in agricultural activities; increased incidence of disease and poor health; increased hazards such as landslides and high incidence of natural disasters; food insecurity; loss of biodiversity

N°	Sustainable development challenge	Main causes	Implications and linkages with other sustainable development challenges
11	Land degradation and desertification	Population pressure; encroachment on forests; desertification; effects of climate change	Disruption of production; persistent drought; loss of soil fertility; food insecurity
12	Deforestation	Population pressure; agricultural encroachment; poor agricultural practices	Reduced rainfall; loss of biodiversity; land degradation; loss of soil
13	Unreliable energy supply	High reliance on biomass fuels; limited investment in clean and modern energy sources	Land degradation and deforestation; limited production levels; climate change effects; limited industrial development
Governance challenges			
14	Increased security concerns and peacebuilding	Instability in the subregion; cultural attachments	Instability of the population; reduced performance of economic activities such as agriculture; limited food production; many refugee camps in the subregion

2.2.6 Opportunities in the Eastern Africa subregion

Eastern Africa has many opportunities, which, if well harnessed, could help to overcome challenges, accelerate growth, and promote sustainable development in the subregion. They include the following:

- (i) *Natural resources:* The subregion has a rich natural resource endowment. These resources include fertile land that could support intensive and mechanized agricultural practices, but where subsistence agriculture by smallholder farmers currently predominates. The subregion possesses forest and national parks that, if conserved and sustainably used, would provide ecosystem goods and services for social and economic welfare.
- (ii) *Oil reserves:* Exploration confirming the presence of billions of barrels in countries such as Uganda, South Sudan, Kenya and DRC. Other countries are rich in minerals, such as gold, diamonds, wolfram and tin. The subregion also has vast water resources that could support hydropower generation to stimulate growth in other sectors, including industry and manufacturing. These could attract direct foreign investments and stimulate growth through local public-private partnerships. In addition, there is potential for island states to develop tourism, which brings in foreign exchange.
- (iii) *Regional Integration:* The subregion has made great strides towards economic integration. It has member countries in SADC, EAC, IGAD, ECGLC and others. Enhanced integration can boost trade across the subregion through specific interventions such as tax exemptions and reduction of barriers through customs unions, among others.
- (iv) *Ongoing development strategies and programmes:* Member States and RECs in the subregion have put in place and are implementing various development strategies and programmes that have facilitated quick response to certain subregional challenges. These can provide a basis for advancing sustainable and inclusive growth and development. Noteworthy are those aimed at poverty reduction, gender integration and environmental protection, which are key in the drive to achieve sustainable development.
- (v) *High rate of urbanization:* In many eastern African countries, urbanization provides countries and individuals with opportunities. For example, high rates of rural-urban migration provide opportunities to address land fragmentation by consolidation for increased production, while the high proportion of a population in cities and towns provides opportunities for formal and informal skilling, thus enabling people to acquire gainful employment, which in turn provides livelihoods for families and revenues for government through taxes.

3. Priority sustainable development themes

A review of the national and subregional strategic and planning documents reveals that countries and subregional groupings have adopted strategies and plans to address the challenges identified. This chapter categorizes the sustainable development priorities as highlighted in the poverty reduction strategies and development documents of countries and RECs in the subregion. In addition to those identified in country poverty strategies, sustainable development issues frequently referred to by subregional bodies/ RECS were considered priorities. The priorities have been categorised into thematic areas.

3.1. National sustainable development priorities

National development priorities appear in national poverty reduction strategies, national development plans, and long-term vision documents. Analysis of country strategies and policies identified the following sustainable development priorities:

- (a) *Poverty reduction/eradication:* All countries indicated poverty reduction as a priority goal. All countries have developed poverty reduction strategy papers or country visions to guide poverty reduction interventions and long-term development. In many countries, agricultural transformation, education and capacity-building, small and medium enterprises development, rural transformation, among others, have been identified as key interventions towards eradicating poverty.
- (b) *Infrastructure development:* Many countries see this as a basis for increasing investment. This infrastructure specifically includes roads, railways, schools and hospitals. Infrastructure development in many country programmes has been extended towards the development of rural areas, where the majority of the population lives and is engaged in subsistence agriculture. Infrastructure is a basis for developing all sectors and addressing challenges such as access to markets.
- (c) *Energy:* Many countries identify energy as a priority for sustainable development. Energy is considered essential for increased industrial growth and accelerated economic transformation. Availability of energy would attract investment programmes and accelerate growth in many sectors.
- (d) *Peace, security and good governance:* Countries indicated that this should be promoted through various mechanisms, including enhancing justice systems, reducing corruption, reconciliation, and constitutionalism.
- (e) *Increasing private investment:* Countries identify developing the private sector and public-private partnership as a priority as it would stimulate industrial growth.
- (f) *Health:* Improved health for all groups of people in eastern African is a priority. Particular attention is paid to maternal and mortality rates, HIV/AIDS incidence rates and family planning efforts. Strategies have also been developed to effectively tackle the non-communicable diseases that have caused many deaths.
- (g) *Sound environmental management:* This is a priority highlighted in country development strategies. In countries, such as Rwanda, this has been handled as a cross-cutting issue. Various environmental protection mechanisms have been designed and are being implemented. Nearly all countries have formulated national adaptation programmes to guide them in identifying resource requirements for climate change mitigation and adaptation. Mechanisms have been identified to reduce carbon emissions and pollution rates. For example, in Kenya, the age of vehicles imported is limited to five years from the date of manufacture.

3.2. Subregional sustainable development priorities

Subregional sustainable development priorities were derived from various subregional and regional documents discussing sustainable development issues in eastern Africa and in the continent with implications for the subregion. Subregional documents reviewed included those of EAC, COMESA and IGAD, while regional documents were from ECA and other United Nations agencies and World Bank reports. The subregional priorities have been categorized as economic, social and environmental.

3.2.1 Economic priorities

- (a) *High and sustained economic growth:* The subregion's focus is on increasing the pace of economic growth through improvements in selected sectors such as the service sector, transforming agriculture, increasing trade and exports, promoting private investment, and transforming small and medium enterprises for economic stability and equality.
- (b) *Infrastructure development:* The subregion prioritizes infrastructure development as a basis for the economic transformation of member countries. Subregional collaboration and transboundary infrastructure linkages offer potential for infrastructure development. The focus should be on roads, railways and cross-border connections that would accelerate growth in other sectors, such as health, agriculture, trade, manufacturing and processing.
- (c) *Achieving food and nutrition security:* Ensuring sustainable food production in the subregion is a priority. Mechanisms emphasizing increased grain and cereal production have been identified in subregional and regional reports. These include increasing sustainable fertilizer application, agricultural mechanization and irrigation in drought-hit countries.
- (d) *Tackling unemployment:* The subregion acknowledges the prevalence of high unemployment rates and has focused on generating employment, especially for the youth, through increased private investment, diversification away from agriculture to other sectors and an increase in off-farm activities. Efforts to increase youth employment opportunities include setting up bank loan schemes to lure youth into self-employment. Efforts to tackle unemployment should be mindful of the gender dimension. Gender inequality should be further addressed through equal opportunities and property rights. Equal opportunities in accessing quality education and health should be prioritized in country development agendas in the subregion.

3.2.2 Social priorities

- (a) *Poverty eradication:* Various programmes have sought to eradicate poverty and reduce the number of people living on less than \$1.25 a day. Programmes have been designed to extend infrastructure and social services into rural areas for the majority of the population.
- (b) *Tackling diseases and improving health:* Addressing health issues, and more specifically HIV/AIDS, reproductive health, incidence of malaria and non-communicable diseases, are among the subregion's priority actions. Health is a priority in the subregion because of the negative effects poor health has on other sectors such as agriculture and manufacturing. Health policies and programmes emphasize reducing the incidence of malaria and other diseases.
- (c) *Education and skills development:* Education and skills development have been made priorities in order to reduce the high illiteracy rates in the subregion. The emphasis is on educating job creators through vocational training instead of educating job seekers. There is also targeted capacity-building to provide the skills necessary for the transformation of the employment indicators and results. Through the African Capacity-building Foundation (ACBF), programmes have been established to enhance efficiency.

3.2.3 Environmental priorities

- (a) *Sustainable land management*: The subregion recognizes sustainable land management as a priority for achieving sustainable development. Various programmes and policies have been devised to ensure effective land management, and land productivity. Increased forestation, terracing and soil erosion control are some of the programmes under way to address land management issues in the subregion.
- (b) *Access to water and sustainable water resources management*: The management of water resources has been identified as a priority. The subregion has also prioritized the extension of clean and safe water to the population especially in rural areas.
- (c) *Climate change adaptation and disaster risk reduction*: Climate change adaptation and disaster mitigation measures have been given priority. Mechanisms have been established to manage watersheds, control flooding and other disasters, especially in disaster-prone areas.

To sum up, the subregional sustainable development priorities identified are:

(i) **Achieving sustainable and inclusive growth and economic transformation**

The aim is to address high poverty levels in all the countries of the subregion. Priority interventions include overall poverty reduction, promoting food security and increased agriculture production, sound natural resources management, support to private sector development, regional integration and sustainable infrastructure development, including energy supply and transport.

(ii) **Achieving a healthy and productive population**

This includes addressing high population growth rates, rapid and unplanned urbanization, poor sanitation, high unemployment rates, especially among the youth, poor health and prevalence of diseases such as HIV and malaria, high illiteracy levels, gender inequality, and poor social protection. The priority sustainable development interventions therefore include; improving access to health facilities, improving the quality of education, promoting gender equality and equity by empowering more women, reducing incidence of HIV/AIDS and non-communicable diseases, expanding social security coverage and transforming rural areas.

(iii) **Achieving efficient use of natural resources and reversing environmental degradation**

This includes enhancing environmental productivity and integrity by tackling, among other things, poor sanitation, unsafe water supply, the negative impacts of climate change, including drought and flooding, air pollution and management of chemical products, desertification issues and unreliable energy sources.

Table 13 summarizes the sustainable development thematic areas and priority actions.

Table 13: Sustainable development themes and priority actions

Sustainable development Themes	Priority actions
1. Sustainable inclusive growth and economic transformation <ul style="list-style-type: none"> • High poverty levels • Food insecurity • Unemployment rates • Infrastructure facilities 	<ul style="list-style-type: none"> • Reduce poverty and achieve food security • Reduce unemployment and create jobs • Develop infrastructure, including for energy, water, transport and sanitation.
2. Achieving a healthy and productive population <ul style="list-style-type: none"> • High illiteracy levels • Health concerns • Poor access to health facilities • High population growth • Low levels of security and stability 	<ul style="list-style-type: none"> • Promote sustainable peace, security and stability • Improve access to health facilities • Improve the quality of education and educational facilities, including for vocational, technical and adult education • Promote gender equality and female empowerment • Reduce population growth rates
3. Efficient use of natural resources and reversing environmental degradation <ul style="list-style-type: none"> • Negative impacts of climate change • Unsafe water and poor sanitation • Land degradation and desertification • High rates of deforestation 	<ul style="list-style-type: none"> • Enhance climate change adaptation and mitigation • Manage environment and natural resources soundly • Manage natural disaster risk reduction

4. Sustainable development goals, targets and indicators

This chapter presents the sustainable development goals, targets and indicators deriving from the analysis of priority development issues in the subregion. The analysis of development issues shows that poverty remains a major challenge and that its reduction would provide a sound basis for the development of the subregion. However, poverty can only be eradicated if certain priority issues are addressed.

Table 14 sets out seven proposed SDGs, targets and indicators covering a range of economic, social and environmental development priorities in eastern Africa. It is proposed to achieve the goals within 15 years, i.e. by 2030.

Table 14: Proposed sustainable development goals, targets and indicators for the Eastern Africa subregion

Goals and targets	Indicators for monitoring progress
Economic transformation	
Goal 1: Eradicate extreme poverty	
Target 1: Eradicate extreme poverty, that is people living on less than \$1.25 dollars/national poverty line by 2030	1.1 Number of people living on less than \$1.25 dollar a day/national poverty line 1.2 Percentage of population living on less than \$1.25 dollars a day/national poverty line
Goal 2: Ensure food security and adequate nutrition	
Target 2: Reduce food imports by 50 per cent by 2030	2.1 Quantity of food imported as total food supply 2.1.1 Proportion of population below minimum level of dietary energy consumption 2.1.2 Prevalence of underweight children under-five years of age
Target 3: Eradicate hunger by 2030	4.1 Nutritional status (per capita caloric intake)
Target 4: Reduce the number of people who have unbalanced diets by 80 per cent by 2030.	
Goal 3: Reduce the rate of unemployment	
Target 5: Increase private investment by 5 per cent by 2030 to stimulate employment opportunities	5.1 Private investment as a percentage of GDP
Target 6 Increase quality employment by 10 per cent by 2030	6.1 Average annual wage 6.2 Job tenure 6.3 Average usual hours of work 6.4 roportion of employees with work related injury
Target 7: Increase diversification to more technical skills-based employment by 10 per cent by 2030	7.1 Percentage of skills-based jobs 7.2 Sector contributions to GDP 7.3 Share of employees receiving job training
Target 8: Reduce the unemployment rate among the youth and graduates by more than half by 2030	8.1 Unemployment rate of graduates and youth 8.2 Employment to population ratio
Target 9: Improve social protection accessibility benefits by more than 30 per cent by 2030	9.1 Social protection coverage Crime rates

Goals and targets	Indicators for monitoring progress
Goal 4: Increase and improve existing infrastructure	
Target 10 : Improve national and cross-border infrastructure (roads, railways, and airports) by 20 per cent by 2030	10.1 Number of intercity connections 10.2 Total road density 10.3 Percentage of total road network paved 10.4 Number of road deaths and injures 10.5 Rail lines (total route-km) 10.6 Time value spent in city traffic
Target 11: Reduce the number of people without access to electricity by 20 per cent by 2030	11.1 Proportion of the population with access to electricity.
Target 12 Attain full access to improved drinking water sources and sanitation by 2030	12.1 The proportion of the population with improved water sources 12.2 Proportion of the population with access to improved sanitation facilities
Target 13: Increase investments in water to increase access to clean water by 10 per cent by 2030	13.1 Annual investment in water and sanitation
Social needs	
Goal 5: Improved access to health facilities	
Target 14: Achieve universal access to quality health care and reduce by half the rate of malaria infection and other diseases by 2030	14.1 Proportion of the population accessing health facilities 14.2 Doctor/patient ratio 14.3 Rate of malaria infections
Target 15: Reduce the rate of HIV/AIDS infection by half by 2030	15.1 HIV/AIDS prevalence rate
Target 16: Increase access to ARVs by 20 per cent by 2030	16.1 Percentage of persons living with HIV and AIDS with access to ARVs.
Target 17: Reduce the child mortality rate by half by 2030	17.1 Child mortality rate
Target 18: Reduce the maternal mortality rate by three quarters by 2030	18.1 Maternal mortality rate Proportion of births attended by skilled health personnel
Target 19: Achieve universal access to reproductive health and reduce unmet family planning need to less than 10 per cent	19.1 Percentage of unmet family planning needs 19.2 Contraceptive prevalence rate 19.3 Adolescent birth rate 19.4 Antenatal care coverage
Goal 6: Improve education facilities	
Target 20: Provide universal secondary education to both girls and boys and increase enrolment by 20 per cent by 2030	20.1 Net rate of secondary enrolment 20.2 Net rate of primary enrolment 20.3 Dropout rate at primary level
Target 21: Increase the number of educational facilities by 20 per cent by 2030	21.1 Pupil to facility ratio(class room, toilet, computer)
Target 22: Increase technical and vocational training schools by 10 per cent by 2030	22.1 Number of technical schools built in a year

Goals and targets	Indicators for monitoring progress
Environmental protection	
Goal 7: Promote efficient use of natural resources and reverse environmental degradation	
Target 23: Ensure that sustainable development principles are integrated into national development policies, strategies and plans	23.1 National development policies, strategies incorporating in a balanced manner the economic, social and environmental dimensions in development policies, plans and programmes
Target 24: Reduce deforestation and forest degradation by half between 2015 and 2030	24.1 Proportion of land covered by forest (%)
Target 25: Reduce water pollution by half and ensure sustainable land management by 2030	25.1 Integration of sustainable land and water management in development strategies 25.2 Desertification rate 25.3 Levels of major water pollutants 25.4 Land and soil degradation rates
Target 26: Reduce air pollution by half by 2030	26.1 Ambient levels of major air pollutants in urban and rural areas
Target 27: Increase access to renewable energy sources by 10 per cent by 2030	27.1 Proportion of population with access to renewable energy 27.2 Proportion of population dependent on biomass use
Target 28: By 2030, natural resources are managed and exploited sustainability, legally and through ecosystem based approaches	28.1 Percentage of degraded ecosystems restored 28.2 Existence and effective enforcement of policies, plans, laws, regulations and standards for environmental protection and management
Target 29: Reduce gas emissions by 10 per cent by 2030	29.1 Carbon dioxide emission per capita
Target 30: Enhance resilience to climate change by 2030 through mainstreaming of adaptation and mitigation measures into development policies, programmes and investment projects	30.1 Integration of climate change mitigation and adaptation in development policies, plans, programmes and investment projects

In order to attain the above goals, good governance and strong institutions are important. They are not only key to eradicating poverty but also to promoting overall sustainable development. It is thus important for institutional mechanisms to be put in place to monitor and evaluate how sustainable development principles and values are respected. This requires:

- (i) Establishment of national multi-stakeholder mechanisms for monitoring purposes;
- (ii) Ensuring wide stakeholder participation, by the public and private sectors, and civil society organizations;
- (iii) Establishment of communities of practice;
- (iv) Reduction of gender inequality;
- (v) Promotion of peace and conflict resolution within and among countries.

5. Conclusion and recommendations

5.1. Conclusion

In recent years economic growth in the subregion has been significant, and a number of countries have set goals of becoming middle-income countries within 20 years. Despite progress made, the subregion is confronted with a number of challenges.

The incidence of poverty and inequality in the subregion remains high. The rate of unemployment and underemployment in the subregion is also high. The eastern Africa subregion is therefore ranked low in terms of the human development index compared with other subregions in Africa. Moreover eastern Africa has one of the highest fertility rates in Africa, resulting in rapid population growth, which is translating into mounting pressures on social services as well as natural resources.

The subregion is also faced with the challenge of achieving food security for all. Food is inadequate both in terms of quantity and quality. In order to reverse this trend, farmers need among other things, support to access appropriate technologies for enhanced agricultural productivity. Infrastructure including road and rail transport networks need to be expanded and improved to facilitate the flow and exchange of food commodities.

Environmental resources, which underpin sustained economic growth and wellbeing in the subregion, are under threat. There is widespread land, forest and biodiversity degradation and loss, which can be attributed to high population pressure, given the predominant role of natural resources in poverty reduction, agriculture and energy source in the subregion. For instance between 1990 and 2010, the subregion's forested area shrank by more than 22 million hectares, and deforestation is expected to continue increasing, as the population grows. Environmental degradation constrains agricultural productivity and production and results in poor water supply and sanitation. This negative trend is exacerbated by climate change.

The report has identified and analysed the social, economic and environmental priorities that need to be pursued in order to achieve national and subregional development objectives and overall sustainable development. These have been translated into specific sustainable development goals and targets, accompanied by indicators that are intended to inspire focused and accelerated actions to promote sustainable development in the subregion. To that end, the report also recognizes the imperative of good governance and strong institutions.

5.2. Recommendations

In order for the proposed goals and targets to translate into concrete sustainable development outcomes, the following are recommended. Countries should:

- (i) Commit to allocating an increased share of public financial resources to sustainable development;
- (ii) Mainstream sustainable development into subregional and national development policies, strategies and programmes. This should entail establishing mechanisms to ensure the balanced integration of the three dimensions of sustainable development;
- (iii) Establish platforms to enable experience-sharing and scaling-up of sustainable development best practices, success factors and challenges, and take appropriate actions to step up implementation;

- (iv) Strengthen mechanisms to enable effective engagement and involvement by subnational actors and local communities in the formulation, implementation and monitoring of sustainable development policies, plans, programmes and activities;
- (v) Strengthen formal and non-formal education, and awareness-raising on sustainable development, especially among local-level stakeholders, in order to enhance wider domestication and implementation of sustainable development programmes and actions;
- (vi) Establish sustainable development centres, including training institutes, where different actors can acquire and exchange adequate knowledge and skills on sustainable development;
- (vii) Establish and promote policy and incentive schemes to enable the private sector to participate actively in sustainable development, including fulfilling its corporate social responsibilities in the sustainable development agenda;
- (viii) Promote good governance and strengthen institutions that support sustainable development at subregional and national levels;
- (ix) Strengthen coordination and collaboration among various organizations within and outside the subregion in order to harmonize interventions, foster exchange of best practices and acquisition of the necessary know-how, including technologies that foster sustainable development.

References

African Capacity-building Foundation (2008). A survey of the capacity needs of Africa's regional economic communities.

Africa Capacity Indicators (2012). Africa capacity indicators for agricultural transformation and food security, Harare.

African Development Bank (2011). Eastern Africa: Regional integration strategy paper, 2011-2015.

(2013). Country Strategy Paper, DRC. Africa Development Forum. 2012. Land and Africa's Development Future: Governing the Risks and Opportunities of Large-scale Land-based Investments, Issues Paper 2.

African Development Fund (2012). Drought Resilience and Sustainable Livelihoods Programme in the Horn of Africa-Phase I. Project appraisal report.

African Development Bank/Organisation for Economic Co-operation and Development. 2010 "Burundi" IN African Economic Outlook.

African Development Bank, Organisation for Economic Co-operation and Development, UNDP, and United Nations Economic Commission for Africa. 2012. "Burundi, *African Economic Outlook 2012*".

Burundi, Ministry of Planning and Communal Development (2011). Burundi Vision 2025.

Coast Development Authority and others (1996). Towards Integrated Management and Sustainable Development of Kenya's Coast.

Coughenour, M.B. and J.E. Ellis (1993). Climate and landscape control of woody vegetation in a dry tropical ecosystem, Turkana District, Kenya. *Journal of Biogeography* 20: 283-398.

East African Community. (2006). EAC Development Strategy, (2006-2010).

(2009). EAC Climate Change Policy Summary.

(2011a). EAC Development Strategy (2011/12 – 2015/16). August 2011. Arusha.

(2011b). Facts and Figures-2010. Available for download from www.eac.int/statistics/

Economic Commission for Africa (2009). The African Social Development Report: Placing social integration at the centre of Africa's development agenda.

(2010). Promoting high level sustainable growth to reduce unemployment in Africa.

(2011). Africa consensus Statement to Rio+20.

(2012a). Eighth Session of the Committee on Food Security and Sustainable Development and the Africa Regional Implementation Meeting for the Twentieth Session of the Commission on Sustainable Development.

(2012b). Harnessing the African Peer Review Mechanism (APRM) potential to advance mineral resources governance in Africa. Sixteenth Meeting of the Intergovernmental Committee of Experts (ICE). 13-17 February 2012, Dar es Salaam, Tanzania. ECA, Addis Ababa, Ethiopia.

(2012c). Main Outcomes of the United Nations Conference on Sustainable Development. Implications for Africa.

(2012d). Outcome Document of the Africa Regional Implementation Meeting for the Twentieth Session of the Commission on Sustainable Development.

(2012e). Sustaining Economic Growth and Development in Turbulent Times. Tracking Progress on Macroeconomic and Social Developments in the Eastern Africa Region 2011-2012. ECA, Addis Ababa, Ethiopia.

(2012f). Tracking progress on Macroeconomic and social development in the Eastern Africa region.

(2013a). Economic Report on Africa 2013: *Making the Most of Africa's Commodities: Industrializing for growth, Jobs and Economic Transformation*, Addis Ababa, Ethiopia.

(2013b). Enhancing Energy Access and Energy Security in Eastern Africa: Case studies in Eastern Africa subregion. Draft Background Report for the 17th meeting of ICE (section 4) (Unpublished).

Economic Commission for Africa, African Development Bank and African Union (2010). Land policy in Africa; A framework to strengthen land rights, enhance productivity and secure livelihoods.

Ellis J. and K. Galvin (1994). Climate patterns and land-use practices in the dry zones of Africa. *BioScience* 44(5): 340-349.

Ellis J.E. and others (1987). Pastoralism and Drought in Turkana District, Kenya. Report to NORAD, Nairobi. 295 pp.

Ethiopia, Ministry of Finance and Economic Development (2010). Growth and Transformation Plan (GTP) 2010/2011-2011-2015.

European Community (2013). Seychelles Strategy Paper and National Indicative Programme 2009-2013.

Galvin, K.A. and others. (2001). Impacts of climate variability on East African pastoralists: Linking social science and remote sensing. *Climate Research* 19:161-172.

(2002). Compatibility of pastoralism and conservation? A test case using integrated assessment in the Ngorongoro Conservation Area, Tanzania. In: Chatty D & M. Colester (eds.). *Displacement, Forced Settlement and Conservation*. Berghahn, Oxford. Global Environmental Facility. (2008). *Integrated Ecological Planning and Sustainable Land Management in Coastal Ecosystems in the Comoros*, Union of the Comoros.

Hirabe, N. O. (2009). Globalization and the challenge of urban development in Uganda: Implications on Land Use Planning in Kampala. Thesis. University of British Columbia. International Fund for Agricultural Development. (2011). Annual Report, 2010. IFAD. Rome, Italy.

International Food Policy Research Institute (2001). Development pathways and land management in Uganda: causes and implications. Environment and Production Technology division Discussion paper No.85. Available from www.ifpri.org/sites/default/files/publications/eptdp85.pdf

International Food Policy Research Institute, Welthungerhilfe, and Concern Worldwide (2012). *The 2012 Global Hunger Index, The challenge of hunger: ensuring sustainable food security under land, water, and energy stresses*. Bonn, Washington DC, Dublin.

International Monetary Fund (2009). Djibouti Poverty Reduction Strategy Paper.

(2010). Action Plan for Implementation of the 2010–2014 Poverty Reduction and Growth Strategy, Union of the Comoros, March 2008.

Kantz, Carola, J.R. Siegel and K. Bimesdorfer (2012). Driving green jobs through rural renewable energy systems. United Nations Research Institute for Social Development.

Lindemann, S. (2004). Madagascar Case Study Analysis of National Strategies for Sustainable Development, June 2004, available at: http://www.iisd.org/pdf/2004/measure_sdsip_madagascar.pdf

McIntyre B.D. and others (2009). *Agriculture at a Crossroads*. International Assessment of Agricultural Knowledge, Science and Technology for Development (IAASD), Washington, DC: Island Press.

Osman-Elasha, B. (2006). Environmental Strategies to Increase Human Resilience to Climate Change: Lessons for Eastern and Northern Africa. The International START Secretariat, Washington DC.

Osman-Elasha, B. and others (2006). Adaptation strategies to increase human resilience against climate variability and change: Lessons from the arid regions of the Sudan -AIACC Working Paper No. 24.

Rwanda. Ministry of Finance and Economic Planning (2000). Rwanda Vision 2020.

Undated. Environmental Sustainability in Rwanda's Economic Development and Poverty Eradication Strategies: Towards Mainstreaming Environment in the EDPRS. Available from: http://www.rema.gov.rw/rema_doc/pei/PRSP_I_Review_WWF.pdf

Rwanda. Ministry of Resources and Environment. (2013). Rwanda's Green Growth Strategy.

Secretariat of the Convention on Biodiversity (2013). Eastern Africa. Financial Planning for Biodiversity.

Shannon, R. (2012). Emergency preparedness and disaster planning in Africa. Consultancy Africa Intelligence.

Seychelles (2012). National Preparations for United Nations Conference for Sustainable Development (UNCSD), National Report, Republic of Seychelles, 2012.

Society for International Development, (2012). *The State of East Africa 2012: Deepening integration, intensifying challenges*. Colour Print Tanzania Limited. Dar es Salaam, Tanzania.

South Sudan, (2011). South Sudan Development Plan 2011-2013.

Tadesse, W. (2013). Overview of Ethiopia's Climate Resilience Economy Strategy. Presentation delivered during a joint AfDB-OECD workshop on enabling green growth in Africa, Lusaka, Zambia, 15-16 January 2013.

Uganda, National Environment Management Authority (NEMA), (2012). National Report on Progress on the Implementation of the Rio Commitments on Sustainable Development in Uganda (draft).

United Kingdom, Department for International Development, (2011a). DFID Democratic Republic of Congo, Operational Plan, 2011- 2015.

(2011b). DFID Somalia Operational Plan, 2011- 2015.

(2011c). DFID South Sudan Operational Plan, 2011 - 2015.

(2011d). DFID Uganda, Operational Plan, 2011 - 2015.

United Nations Children's Fund (UNICEF)/World Health Organization (WHO), (2009). Diarrhoea: Why children are still dying and what can be done.

United Nations Conference on Sustainable Development, (2012). Progress towards Sustainable Development in Eastern Africa.

United Nations Department of Economic and Social Affairs, Secretariat of the United Nations Conference on Sustainable Development and United Nations Development Programme, (2012). Sustainable Development in Kenya: Stocktaking in the run-up to Rio+20, Nairobi-Kenya, 2012.

United Nations Development Programme, (2012). *Africa Human Development Report: Towards a food secure future*. United Nations Development Programme, Regional Bureau for Africa (RBA).

United Nations Environment Programme, (2004). Sustainable Development Priorities for Southeast Asia.

United Nations Educational Scientific and Cultural Organization (UNESCO), (2012). Adult and Youth Literacy Rates.

United Nations General Assembly, (2012). Secretary-General's Initial Input on the Open Working Group on Sustainable Development Goals.

United Nations Children's Fund, (2011). Somalia Programme Document 2011-2015.

United Nations International Strategy for Disaster Reduction, (2013). Progress Report on the Implementation of HFA and Programme of Action for the African Regional Strategy: Achievements, Challenges and Focus Areas by the End of HFA2015 and beyond, HFA 2 – Post-2015 DRR Framework. The Case of Inter-governmental Authority on Development (IGAD) and the Eastern African Community (EAC) Subregions.

UN-SPIDER, (2013). United Nations Platform For Space-Based Information for Disaster Management and Emergency Response website. <http://www.un-spider.org/about-us/news/indian-ocean-islands-cooperate-establish-disaster-loss-databases>

United Republic of Tanzania, (2010). Tanzania Vision 2010-2025.

(2011). Tanzania Five Year Development Plan 2011-2016. President's Office, Planning Commission.

United States, President's Emergency Plan for AIDS Relief (PEPFAR), (2012). Burundi Operational Plan Report.

World Bank (2012). Gender Equality Rating.

1. 2012. Gross National Income per Capita, Atlas Method (Currency US \$)

2. (2012). World Development Indicators, 2012. World Bank. Washington DC. Available at: <https://openknowledge.worldbank.org/handle/10986/6014> License: CC BY 3.0 IGO.

(2013). World Bank national accounts data, and OECD National Accounts data files: available at: <http://databank.worldbank.org/data/views/reports/tableview.aspx>

World Commission on Environmental Development (1987). *Our Common Future*. Oxford: Oxford University Press.

World Food Programme (2000). Kenya's drought: No sign of any let up. WFP, Rome, Italy; available at www.wfp.org/newsroom/in_depth/Kenya.html

World Health Organization (1964) Report of WHO Expert Committee on Atmospheric Pollutants. World Health Organization. Tech. Rep. Ser. 1964, No.271.

(2010). World Health Statistics.

(2011). Global Health Observatory Data Repository.

World Health Organization and United Nations Development Programme, (2009). The Energy Access Situation in Developing Countries.

