

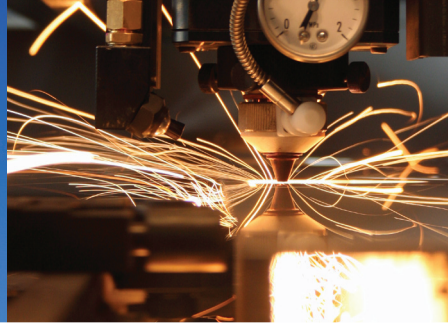



RIO+20
United Nations Conference
on Sustainable Development

Progress towards sustainable development in Eastern Africa

Economic Commission
for Africa

RIO+20
United Nations Conference
on Sustainable Development

Progress towards sustainable development in Eastern Africa

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To order copies of *Progress towards Sustainable Development in Eastern Africa* by the Economic Commission for Africa, please contact:

Publications:
Economic Commission for Africa
P.O. Box 3001
Addis Ababa, Ethiopia

Tel: +251 11 544-9900
Fax: +251 11 551-4416
E-mail: ecainfo@uneca.org
Web: www.uneca.org

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Abbreviations and Acronyms

AfDB	African Development Bank
AU	African Union
AUC	African Union Commission
AMCEN	African Ministerial Conference on the Environment
COMESA	Common Market for Eastern and Southern Africa
EAC	East African Community
GDP	Gross domestic product
IGAD	Intergovernmental Authority on Development
MDG	Millennium Development Goal
NCSD	National Council for Sustainable Development
NEPAD	New Partnership for Africa's Development
NSSD	National Strategy for Sustainable Development
ODA	Overseas development assistance
RECs	Regional economic communities
UNDP	United Nations Development Programme
UNEP	United Nations Environment Programme
UNFCCC	United Nations Framework Convention on Climate Change
WRI	World Resources Institute
WSSD	World Summit on Sustainable Development

Executive summary

This report provides information on the progress made in the Eastern African subregion in implementing Agenda 21 and the various commitments, programmes and time-bound targets adopted at the World Summit on Sustainable Development (WSSD). It also assesses progress made in fulfilling the provisions of the Johannesburg Plan of Implementation (JPOI) adopted at the conclusion of the Summit. This assessment is part of the preparatory process for the United Nations Conference on Sustainable Development to be held in Rio de Janeiro in June 2012, also known as Rio+20. A number of issues pertaining to sustainable development and the need to promote closer convergence among the three pillars of sustainable development are assessed in the report.

(a) Priority sustainable development issues and trends

A number of priority sustainable development issues may be discerned in the subregion. The report highlights nine priority issues, including economic growth and wealth creation; agriculture, food security and climate change; investing in people; poverty, inequality and social deprivation; energy and energy poverty, environment for sustainable development; environment for peace and security; sustainable consumption and production, including the issue of waste management; the role of regional integration and regional, national and local level partnerships for sustainable development.

The subregion has some of the fastest-growing economies in the world. It also has some of the highest levels of poverty. Poverty eradication requires rapid economic growth and industrialization, which in the absence of access to new technologies and financial resources will require both the consumption of large amounts of natural resources and generation of waste. This will exert considerable pressure on the environment and natural resource base. There is already evidence of such pressure in the subregion.

(b) Concrete actions taken, highlighting best practices, progress made and achievements

A number of concrete actions at the legal, policy, institutional and implementation level have been taken to address the numerous challenges to sustainable development in the subregion. Pertinent examples include deepening regional integration at both the East African Community (EAC) and Intergovernmental Authority on Development (IGAD) levels and increased joint implementation of actions. In the area of wealth creation for instance, a number of interrelated actions aimed at reducing supply-side constraints, improving competitiveness and fostering comparative advantage have been undertaken. These however, need further upscaling and replication across the subregion. There are also joint actions to ensure environmental sustainability, including EAC climate change policy and strategy, regional guidelines on environmental impact Assessment for transboundary resources and guidelines and protocols on natural resources. The various actions have achieved far-reaching political, economic and social changes marked by increasing commitment to sustainable development.

(c) Implementation challenges and constraints

A number of challenges impede the rapid progression towards sustainable development in the subregion. The challenges emanate from three key sources. The first is poverty and low economic growth, the second the high level of environmental degradation coupled with climate change, and the third the lack of technical implementation capacity and the slow response by the international community to address the subregion's development problems, including the HIV/AIDS pandemic, conflicts and institutional and policy failures. Overall, the challenges revolve around these three pillars: the economy, society and the environment. This calls for smart ways of designing and implementing sustainable development options that harness the sum of the benefits from all the pillars. More emphasis should be put on good governance, building on existing successes in policy, regulatory frameworks and participations management of the subregion's natural resource base. Future progress will depend on how the region's natural resources, including forests, land, biodiversity, mountains, tourism, minerals and water resources are managed for social equity, economic prosperity and environmental integrity.

(d) Interlinkages between the economic, social and environmental pillars of sustainable development

The sustainable management of the subregion's natural resources forms the basis for poverty eradication and sustainable development. The subregion's natural resource base faces several threats, however, including environmental degradation, water scarcity, water quality deterioration, siltation, deforestation, overfishing and overgrazing, which together jeopardize its chances of progressing towards sustainable development. The subregion must recognize the contribution of the natural resource base to economic growth and social transformation and develop indicators that help to monitor the impact of economic growth on the natural resource base and that of the natural resource base on the economy.

(e) Institutional framework for sustainable development in the subregion

Agenda 21 and the JPOI both called upon countries to establish National Councils for Sustainable Development and National Strategies for Sustainable Development. The purpose of these institutions and strategic frameworks is to reduce fragmentation and foster integration of the three pillars of sustainable development. There is evidence that sustainable development and related national and regional governance arrangements have improved in the subregion. Greater strengthening of these mechanisms, particularly to further improve the monitoring and integration of the three pillars of sustainable development in an integrated and balanced manner, needs to be undertaken.

(f) Transition towards a green economy within the context of poverty reduction and sustainable development in the subregion

The green economy offers considerable opportunities for mobilizing resources towards a low-emission, climate-resilient development pathway. This is, however, not without challenges. The key challenge is how the green economy will contribute to sustainable development and poverty reduction objectives, while improving welfare and the quality of life for the subregion's poor. The green economy will necessarily require an increase in levels of consumption, in particular of food, energy and water. Policies and investment to sustain and enhance natural capital assets – the

soils, forests and fisheries on which many poor people depend – will be instrumental. At the same time, the economic system needs to develop, enabling the region to improve its terms of trade and to increase its productivity. The pathway toward a green economy will require mobilization of new financial resources from public and private sources. This implies a realignment of policy goals and priorities and the related allocation of capital, while addressing the immediate and pressing development concerns and poverty alleviation objectives. Overall, the green economy is a welcome development that the subregion is willing and ready to embrace. The transition will however, entail additional costs, which require new and additional financing, access to technologies and capacity-building, meaning that scaled-up, adequate and predictable international support must be provided to the subregion. On the other hand, the transition should not be used as a justification for new barriers to trade, aid or access to finance.

(g) New and emerging challenges

The key new and emerging challenges to sustainable development in the subregion include climate change and the associated extreme weather conditions; rising water scarcity; the unfolding financial crisis; halting progress towards the Millennium Development Goals (MDGs); the global food crisis and high food prices; the energy crisis precipitated by the unprecedented volatility in energy prices; biodiversity loss; the degradation of ecosystems, including marine ecosystems; inefficient and wasteful patterns of consumption and production; and a succession of natural disasters. The myriad of challenges justify a total change of economic policy, including the patterns of production, distribution and consumption within a framework of green growth.

(h) Conclusion and recommendations on the way forward

Although the subregion has progressed in integrating the pillars of sustainable development, a number of weaknesses and challenges still remain and must be addressed. The key challenges relate to the lack of financial resources to foster sustainable development, given a weak private sector and limited public resources, in a context where donor commitments have not been forthcoming. Yet the transition to a green economy requires new technologies and additional human and financial resources.

- The subregion, though endowed with a rich natural resource base, currently benefits from a very small amount of global environmental financing for lack of technical capacity to develop bankable projects. Special windows for international financing need to be dedicated to the subregion to address mounting financing needs.
- The international community will have to step up access to technology and technology transfer that is both affordable and suited to the African context, inline with the Bali Strategic Plan for Technology Support and Capacity – building (e.g. solar, small and mini hydros, etc).
- The green economy is a welcome development that the region is willing and ready to embrace. However, this development should not be used as a means to justify additional barriers to trade, aid or access to finance.
- Land use planning, urban planning and infrastructure development are needed which include concrete actions and best practices. These practices must be stepped up to enable the subregion to embrace and benefit from the transition to a green economy.
- Institutional mechanisms to monitor and ensure balanced integration of the three

pillars of sustainable development need to be established. Where they already exist, they should be strengthened and positioned in such a way that they have the muscle to influence policy and decision-making.

- Countries need to recognize the contribution of the natural resource base to economic growth and social transformation and integrate natural resource accounting into national economic statistics and reporting. This will provide an informed basis for them to increase the share of their national budgets allocated to sustainable development.

Introduction

The purpose of this report is to provide a well-informed statement on the progress made in the Eastern Africa subregion towards sustainable development since the Rio Earth Summit in June 1992. The report forms part of the subregional preparatory process for the Rio+20 summit to be held in Rio de Janeiro, Brazil in 2012. It provides an overall appraisal of the progress of implementation of Agenda 21, the Programme for the Further Implementation of Agenda 21 and the JPOI. The overall preparatory process followed a decision by the Second Committee of the United Nations General Assembly and the thirteenth Session of the African Ministerial Conference on the Environment (AMCEN), which recommended efficient and effective preparations for Rio+20.

In order to set the context for the report, the introduction provides a synopsis of the key landmark events in the field of sustainable development since the United Nations Conference on the Human Environment held in Stockholm in 1972. It highlights the key outcomes of the various summits and meetings and provides a working definition for sustainable development.

The Stockholm Conference highlighted the first global concern for sustainable development. It generated a Declaration on the Human Environment, also called the Stockholm Declaration and an Action Plan. The Action Plan, though dominated by environmental considerations, also highlighted key principles that called for the rational and integrated planning of all development processes, as well as the harmonization of development and environment objectives. It also listed 109 recommendations for national governments had to adopt to curb environmental degradation. As an additional output, the Conference adopted five resolutions relating to a ban on nuclear proliferation, the creation of a system for the management of environmental information, deliberate efforts to integrate environment and development objectives, the creation of an environment fund, and the establishment of a global agency to champion environmental governance, now the United Nations Environment Programme (UNEP). The overall message of the Conference was the need to champion, at all levels, comprehensive planning approaches that take into account the impacts of human activities, with a view to protecting and enhancing the human environment for present and future generations.

The Stockholm Conference provided the impetus for the establishment of the World Commission on Environment and Development, or Brundtland Commission, in 1983. The terms of reference for the Commission were to study the accelerating deterioration of the human environment and natural resources and the consequences of that deterioration for economic and social development. In establishing the Commission, the United Nations General Assembly recognized that environmental problems were global in nature and that it was in the common interest of all nations to establish policies for sustainable development. The Commission published an important report, *Our Common Future*, which proposed long-term environmental strategies for achieving sustainable development up to the year 2000 and beyond. The report also recommended various ways and means by which the international community could deal more effectively with environmental concerns, including greater cooperation among developing countries and between countries at different stages of economic and social development.

The report also provided the first definition of sustainable development: "…development that meets the needs of the current generation without compromising the ability of future generations

to meet their own needs". This definition has since been modified to define sustainable development as a pattern of development that integrates economic, social and environmental objectives in a balanced manner.

The United Nations Conference on Environment and Development, held in Rio de Janeiro in June 1992, provided an opportunity to evaluate the progress the global community had made since the Stockholm Conference. The summit assessed how environment and development objectives could be better harmonized to achieve both intragenerational and intergenerational equity. It provided a rare political platform where the global community committed to embrace sustainable development. It also galvanized an international commitment to provide public and political support for addressing environment and development issues in a holistic and integrated manner. The principal outputs of the Rio summit included the Rio Declaration on Environment and Development, with Agenda 21 as its implementation mechanism, the Statement of Principles for the Sustainable Management of Forests and three key conventions, the United Nations Framework Convention on Climate Change (UNFCCC), the United Nations Convention on Biological Diversity and the United Nations Convention to Combat Desertification.

The Rio Declaration and Agenda 21 program set out 27 principles on which nations agreed to base their actions in dealing with the environment and development nexus. Agenda 21 constitutes a 40-chapter comprehensive programme of action to help achieve a more sustainable pattern of development. In the Framework Convention on Climate Change nations agreed to reduce the risk of global warming by limiting the production of greenhouse gases to 1990 levels by the year 2000. This Convention was renegotiated into the Kyoto Protocol to set legally binding targets by the year 2010. Further negotiations culminating in the Copenhagen Accord and the outcomes of the 2010 meeting in Cancún have affirmed that a global strategy for low emissions is indispensable to sustainable development.

The other two conventions focused on protecting of the diversity of species, communities, habitats and biomes, combating desertification and mitigating the impacts of drought.

The United Nations Commission on Sustainable Development was created to monitor and report on implementation of the outcomes of the Rio Conference. The first five-year review of the conference recommendations (Rio+5), in 1997, reported little progress on the part of governments, international organizations and civil society. It also noted that poverty and social inequity had increased while official development assistance, which should have risen over the period, had actually declined. The review noted with concern that little or no technology transfer was taking place; consumerism had increased in the developed world, while hunger and deprivation were a common phenomenon in the developing world. The General Assembly therefore adopted a Programme for the Further Implementation of Agenda 21.

The World Summit on Sustainable Development (WSSD) was convened in Johannesburg, South Africa in 2002 to conduct a ten-year review of progress since the Rio Conference and reinvigorate the global commitment to sustainable development initially proclaimed in Rio in 1992. The summit noted that some progress towards sustainable development had been made, albeit at a very slow pace. It acknowledged that the full integration of the environment and development pillars of sustainable development remained a big challenge, and that development continued to cause widespread environmental degradation, biodiversity loss and deeper poverty.

The social pillar also remained unimproved, with widespread political unrest and civil strife across most regions of the world.

WSSD generated two important documents: the Johannesburg Plan of Implementation (JPOI) and the Johannesburg Declaration on Sustainable Development. The JPOI provided the framework for further action on the commitments initially agreed in Rio UNCED. It also addressed poverty eradication, consumption and production, the natural resource base, health, small island States, Africa, other regional initiatives, means of implementation, and an institutional framework for sustainable development. The Declaration highlighted the key challenges to effective implementation of the plan of implementation and underscored the importance of a multilateral approach to sustainable development.

The Summit participants broadly agreed that there was a dire need for more countries to convert international obligations into national policies on sustainable development. They recommended a shift from mere prescription of normative standards to the development of operational programmes that help to provide scientific and technological solutions to societal problems. The summit secured the ratification of both the Kyoto Protocol to the UNFCCC and the Biosafety Protocol to the United Nations Convention on Biological Diversity, and in so doing further strengthened international environmental regulation. Furthermore, it promoted global partnerships for sustainable development by advocating collaborative project-based implementation as a complement to international regulation.

In December 2009, in response to concern that the world continued to face a multitude of interrelated social, economic and environmental challenges, the Second Committee of the United Nations General Assembly decided to organize a United Nations Conference on Sustainable Development (UNCSD) at the highest possible level in Brazil in 2012. The objective of the conference is to secure renewed political commitment for sustainable development, to assess progress to date and to articulate the remaining gaps in achieving sustainable development. It will also identify and assess new and emerging challenges to sustainable development. The main discussions will, however, focus on two key themes – the green economy in the context of sustainable development and poverty eradication, and institutional frameworks for managing sustainable development.

In order to ensure high-quality inputs to the conference, the Second Committee called for efficient and effective preparations at the local, national, regional and international levels by governments and the United Nations system and encouraged the active participation of all major groups at all stages of the preparatory process. The Committee also decided that the Conference and its preparatory process should take into account the decision taken at the eleventh session of the Commission on Sustainable Development to carry out, at the conclusion of the multi-year programme of work, an overall appraisal of the implementation of Agenda 21, the programme for the further implementation of Agenda 21 and the JPOI.

The Second Committee's decision to convert the regional implementation meetings planned to prepare for the upcoming Commission session into regional preparatory meetings for Rio+20 reflects the importance attached to regional reviews in bridging the gap between global and national review processes. An effective regional preparatory process is therefore essential to effectively guide and prepare African countries to collectively articulate their concerns and

priorities at the Conference. The process will also serve to strengthen the regional consultative mechanism to support national implementation following the Conference.

At its thirteenth session, held in Bamako, Mali, in June 2010, the African Ministerial Conference on the Environment (AMCEN) underscored how important it was for Africa to prepare effectively for Rio+20. It adopted the Bamako Declaration on the Environment for Sustainable Development, calling upon ECA, UNEP, other United Nations agencies, the AUC, the African Development Bank (AfDB), regional economic communities (RECs), African civil society organizations (CSOs), other stakeholders and partners effectively to collaborate in the African preparatory process for Rio+20, with a view to ensuring that Africa's concerns and priorities are effectively tackled in the Conference outcomes, including by means of the provision of adequate and appropriate support for the implementation of Africa's sustainable development agenda.

Meanwhile, the Regional Coordination Mechanism of United Nations agencies and organizations working in Africa in support of the African Union and its New Partnership for Africa's Development (NEPAD) Programme agreed at its eleventh Session on the need for continental institutions, including AUC, RECs and AfDB, to be effectively engaged in the preparations for Rio+20. It recommended that those engaged in preparations for and inputs to Rio+20 should pursue a bottom-up approach in reflecting on and addressing the real operational challenges and opportunities for sustainable development. This recommendation fitted well with the proposal to undertake subregional consultations in Central, Southern, Eastern, Northern and West Africa. The present report is the subregional report prepared for the Eastern African consultations and fed into the Africa-wide consultations for Rio+20 held in Addis Ababa, Ethiopia, from 20 to 25 October 2011.

Purpose, scope and methodology of the report

This report was prepared within the framework of the Africa regional preparatory process for Rio+20, and though the collaboration of ECA, EAC and IGAD, with financial and technical support from AfDB and ECA. The overall objective of the report is to present a well-informed statement on progress towards sustainable development in the Eastern African subregion, to contribute to a consensus on key sustainable development concerns and priorities in the region and to effectively articulate them so that they are adequately reflected in subsequent background and outcome documents of the Rio+20 summit.

The report takes stock of the progress made towards sustainable development by the 12 countries of the Eastern African subregion. It articulates the progress made in implementing sustainable development in general, and particularly the commitments agreed in Agenda 21, the Programme for the Further Implementation of Agenda 21, and the JPOI. It also assesses progress made in implementing other global commitments, including those in the Millennium Declaration and the eight MDGs.

The report documents the major accomplishments and lessons learnt and highlights the key constraints and challenges faced by the 12 countries of the subregion, Burundi, the Comoros, Djibouti, Eritrea, Ethiopia, Kenya, Madagascar, Rwanda, Seychelles, Somalia, the United Republic of *Tanzania* and Uganda, in their pursuit of sustainable development. It also assesses various efforts made by such organizations as the RECs (the Common Market for Eastern

and Southern Africa (COMESA), EAC and IGAD), AUC, AfDB, the World Bank, ECA and UNEP. It articulates new and emerging challenges to advancing Eastern Africa's sustainable development agenda including the need for well thought out institutions and strategic frameworks for the effective pursuit of sustainable development. It also provides a clear understanding and appreciation of the prospects of and challenges in achieving a green economy approach to development in the subregion. Lastly, it presents well-informed recommendations to enhance future progress towards sustainable development.

Compilation of the report followed extensive desk reviews, e-mail and telephone discussions and verification visits to Burundi, Djibouti, Ethiopia, Kenya, Rwanda and The United Republic of Tanzania. Discussions were also held with individuals and institutions in Uganda to determine the progress made in pursuit of the various commitments on sustainable development at the national level.

1. Priority sustainable development issues and trends

(a) Economic growth and wealth creation

The Eastern African subregion has enjoyed high levels of economic growth in the last 10 years following impressive growth in the strong economies in the subregion. The economies that have performed well are Ethiopia, Rwanda, the United Republic of Tanzania, and Uganda with average annual growth in gross domestic product (GDP) rate among them of over 9.6 per cent in 2008 (IMF, 2010). The key growth sectors were services, including telecommunications and tourism, industry, construction, mining and agriculture. The main drivers of growth included good domestic macroeconomic policies, an excellent trade performance due to high international and regional commodity demand, and good commodity prices ECA 2011a).

The countries of the subregion were the fastest-growing economies in sub-Saharan Africa and, more broadly, the developing world. Indeed, according to an International Monetary Fund (IMF) report for 2010, Ethiopia, Rwanda, the United Republic of Tanzania, and Uganda were among the fastest – growing economies in the world. Rapid economic growth was achieved thanks to telecommunications in Kenya, infrastructure development in Ethiopia, Rwanda and Uganda and a robust mining sector in the United Republic of Tanzania (ECA 2011a).

However, the high rates of growth in GDP decelerated to an average real GDP annual growth rate of less than 4.7 per cent starting in 2009. This slump in growth was due to the global economic and financial crisis that began in the latter part of 2008. The major negative indicators of the economic downturn in the subregion include inflation, currency depreciation, high food prices, high oil prices and reduced foreign remittances. Some of these are directly associated with the violent political events in the Maghreb and the Middle East, and the increased incidence of piracy on the western rim of the Indian Ocean (ECA 2011a).

The global financial and economic downturn was identified as the most pressing development challenge in the subregion. Others included the region's marginalization in international trade, limited intraregional trade and unemployment. Sub-Saharan Africa, including the subregion, accounted for only 1.85 per cent of world trade in 2009. This was slightly lower than its share of 1.95 per cent in 2008. In 2009, sub-Saharan Africa accounted for slightly more than 1.4 per cent of United States merchandise exports, and 3 per cent of United States merchandise imports – of which nearly 81 per cent were petroleum products. Similarly, the region's trade accounted for a little more than 1 per cent of both European Union merchandise exports and imports. Besides the region's share in world trade being low, it continued to be dominated by raw agricultural and mineral products (Loucif and Rubin, 2011).

The pattern of the subregion's import and export destinations continued to be strongly influenced by historical links with the outside world. Most countries in the subregion still export to markets outside Africa, with the European Union and the United States accounting for over 50 per cent of total exports. Notwithstanding geographical proximity, the countries of the subregion trade more with the European Union than with other economies in the region and subregion. This outward orientation has not fostered regional integration, or the development of regional infrastructure (ECA, 2008).

Whereas most of the countries in the subregion have registered positive economic growth, most of the growth was "jobless". Concern at increasing unemployment was echoed by the Economic Report on Africa 2011, which identified employment creation as a major challenge to sustainable development in the subregion and the rest of the continent (ECA 2011b).

Unemployment is a critical issue that must be addressed urgently, in view of the role of unemployed youths in the recent events in north Africa and the Arab world. However, a reconfiguration of the structure of production, distribution and consumption will be required to stimulate massive employment creation. This reconfiguration will need to emphasize green jobs which generate income and support livelihoods without degrading the stock or quality of natural capital.

(b) Agriculture, food security and climate change

Food insecurity is one of the most pressing problems in the Eastern African sub region. Two important points should be noted. First, there has been a considerable decline in the level of food production in the region. Secondly, the price of food has dramatically increased in the last two years, making food effectively unavailable to many households (World Bank 2010).

A study carried out by the International Food Policy Research Institute in 2001 predicted reduced food crop yields as a result of environmental degradation and extensive soil fertility loss. It pointed out that most farmers in the region till the land without applying the requisite soil and water conservation techniques necessary to maintain soil fertility and productivity. Many farmers do not apply either organic or inorganic fertilizers. The study also noted that many farmers have been forced to reduce the fallow period or to relocate to marginal lands because of pressure on land. The consequent reductions in food production are worsened by post-harvest losses due to pests, diseases and wastage (International Food Policy Research Institute, 2001).

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. Their scope to seek alternative survival strategies are undermined (EAC, 2011). Food production and food security in the subregion are very susceptible to climate change. Food production systems have to be revolutionized to address the inherent bottlenecks, including the dependence of agriculture on rain, extensive soil nutrient loss and land degradation.

The other area of concern is high and volatile food prices. The average annual headline inflation for the Eastern African subregion was 6.6 per cent in 2009, with spikes in Burundi and Uganda, which registered even higher rates of 9.6 and 10.5 per cent respectively (EAC 2011). The key driver of food price increases was the high cost of mechanized tillage, fertilizers and transport to markets, coupled with the increased use of grain for feedstock and biofuels. In order to control the unprecedented increases in food prices, a number of measures including food price regulation, food storage and processing and value addition need to be promoted. However, these measures will only supplement and not replace measures to increase food production in the subregion.

The African Union-NEPAD Comprehensive Africa Agricultural Development Programme therefore offers, a welcome framework in the subregion. Areas of specific interest for the subregion include plans to increase the total irrigated area, promote the use of high-yielding, high-value and disease-resistant and drought-resistant varieties of both cash and food crops and

seek value addition in the context of local needs and value chains to address national, regional and international preferences.

(c) Poverty, inequality and social deprivation

There is consensus that poverty is decreasing across the subregion. Countries have registered commendable improvements in this regard. The 2009 United Nations *Millennium Development Goals Report*, for example, reported a drop in the level of poverty from 57 per cent in 1990 (the baseline year for the MDGs) to 51 per cent in 2005. The level dropped further to about 47.5 per cent in 2010 (World Bank, 2010).

Good performance was also registered for the education and gender indices. Most of the countries in the region are on track to achieve MDGs 2 and 3 on achieving universal primary education and promoting gender equality and empowering women. Progress towards MDG 2 is attributed to the abolition of primary school fees and government mobilization to ensure that all children of school-age are in school.

Progress towards Goal 3 on gender equality and empowerment of women is attributed to specific efforts to close the gender gap in education, employment and political leadership positions, especially in national parliaments and political councils. Ethiopia in particular has performed extremely well, with women now holding over 47 per cent of the job slots. Burundi, the United Republic of Tanzania and Uganda have also attained the Convention on the Elimination of all Forms of Discrimination Against Women and the Beijing Platform for Action targets of 30 per cent set out in the (United Nations, 2010).

Though considerable strides have been made with regard to the social pillars mentioned above, a number of challenges still remain. Achievements in school enrolment rates are not matched with high completion rates and subsequently high enrolment and completion rates at secondary and tertiary levels. The educational content has also been found not to match the demands of the job market to produce productive graduates.

Progress in achieving MDGs 4, 5, 6 and 7 is also slow, and in the case of HIV/AIDS, for instance, previous gains in reducing infection rates have been reversed, with more people, particularly married couples, catching the disease at increasing rates. Movement towards other health targets, including those related to child and maternal mortality, access to reproductive health and the incidence of malaria and other diseases, has also been slow. Reaching targets on environmental sustainability and biodiversity loss has also remained challenging.

Although poverty levels have significantly decreased across the region, the average poverty rate of 47.5 per cent for the region is still very high. The average masks individual country poverty levels that 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 was 24.7 per cent (2010) while the United Republic of Tanzania 35.7 per cent (2001).

The individual country statistics imply that over 100 million people in the region live below the poverty line. The limited resources at the disposal of governments in the region are naturally

devoted to poverty eradication and wealth creation as opposed to addressing climate change and other environmental challenges. This fact was acknowledged in the Climate Change Convention when it asserted that "economic and social development and poverty eradication are the first and overriding priorities of developing country parties' (4, para. art. 7).

Poverty generates many negative implications. In countries with long-standing ethnic tensions like Burundi, Kenya, Rwanda and Uganda, the unequal distribution of economic resources further deepens ethnic tensions, maintains undercurrents of ethnic hostility and could reignite conflict. Poverty degrades environmental income and breeds more poverty. Environmental resources, on the other hand, provide important means of mitigating poverty. In relative terms also, environmental income is more important to poorer than richer households (Cavendish and Campbell, 2007).

National governments and regional intergovernmental organizations are committed to taking effective response measures at both national and regional levels to address poverty, hunger and inequality. It is also hoped that the recent onset of the rains could restore positive prospects for food security and reverse the inflationary pressures in the subregion. But Africa cannot continue to rely on rain-fed agriculture, particularly in view of the projected impacts of climate change in the subregion. Governments have to promote technologies that make people less exposed to the vagaries of nature. On the broader scale, governments must ensure increased opportunities for all in education, industry, trade and public-sector employment. This will evenly distribute resources and bridge the gap between the poor and the rich.

(d) Environment for sustainable development

Hundreds of millions of people in the Eastern African subregion directly depend on the environment and the natural resource base. The subregion's environmental assets underpin the quality and integrity of both local livelihoods and national and regional economies. The Second Africa Environment Outlook report published by UNEP in 2006 acknowledged that the integrity of Africa's environmental assets is critical to the attainment of the MDGs. The Eastern African subregion cannot afford to lose its environmental assets through degradation.

Most of the countries in the region are active participants in many international environmental conventions, protocols and agreements and processes. They have ratified the United Nations Convention on Biological Diversity, the United Nations Convention to Combat Desertification, the United Nations Framework Convention on Climate Change, the Cartagena Protocol on Biosafety, the Kyoto Protocol, the Basel Convention on the Control of Transboundary procedure for certain hazardous chemicals and pesticides in International trade movements of Hazardous Wastes, the Rotterdam Convention on the Prior Informed Consent, the Vienna Convention for the Protection of the Ozone Layer and the Montreal Protocol to the Vienna convention on Substances Deplete the Ozone that, the Stockholm Convention on Persistent Organic Pollutants, the Bamako Convention the on transboundary movement and management of hazardous wastes, the United Nations Convention on the Law of the Sea, the Ramsar Convention on Wellands of International Importance, especially as waterfall Habitat, and the Convention on International Trade in Endangered Species of Wild Fauna and Flora, among others.

1. The countries also participate in international and regional processes on sustainable

development, including those promoted by the United Nations General Assembly, UNEP the World Trade Organization and the United Nations Conference on Trade and Development. They have also developed strategies, action plans and programmes at the national level to combat desertification, reduce biodiversity loss, implement the Stockholm Convention and adapt to climate change. They have endorsed the NEPAD environmental action plan in addition to participating in regional conservation initiatives including the Nile Basin Initiative, the Lake Victoria Environmental Management Project and the Mount Elgon Regional Environment Conservation Programme, among others.

2. Many state–of-the-environment reports published in the region indicate a downward spiral of poverty and environmental degradation. Though they acknowledge increased awareness of the link between the quality of the environment and human well-being, they note that environmental degradation, particularly land degradation, has increased, and is undermining the ability of many communities to feed themselves. In the highland areas of Burundi, Ethiopia, Rwanda and Uganda sheet and rill erosion and landslides and the associated physical degradation processes are dominant features. Forest resources are also rapidly disappearing and with them the biodiversity resources they hold. Encroachment, human settlements, overgrazing and recurrent droughts have all undermined the forest and woodland resources in the region. The associated physical changes and impacts have been vividly depicted through maps, photographs and satellite images in a series of atlases of environmental change, published in the subregion with technical support from UNEP.

3. The Eastern African subregion includes some of the most water-stressed countries in the world. The Africa Water Atlas (UNEP, 2010) identifies Ethiopia, Kenya, Somalia and the United Republic of Tanzania as some of the water-constrained countries that have to feed their people using rain-fed agriculture. The region also contains some of the world's driest lands. These arid and semi-arid lands are generally the areas in which food security is most tenuous in Africa.

4. However, the region also contains are areas of high rainfall that contribute generously to the total flow of major rivers including the Nile. In spite of their importance, these areas – mostly forests – also face an onslaught of environmental degradation, leading to significant reductions in stream flow. A rise in cases of water pollution has also been reported (UNEP, 2010).

5. Another concern in the subregion is the increasing frequency and severity of environment-related hazards. Environmental hazards comprise a significant portion of the health risks facing the poor, and children bear the brunt of this. Children are estimated to suffer 40 per cent of the environment-related burden of disease (UNDP and others, 2005). Environmental diseases constitute one of the new and emerging environmental issues associated with climate change. Although the Eastern African subregion has some of the lowest per capita emissions of greenhouse gases in the world, it carries the greatest burden of climate – sensitive diseases Vector – borne diseases such as malaria, dengue fever, schistosomiasis and Rift Valley Fever have expanded their ranges as temperature and rainfall patterns change. Higher temperatures and humidity, coupled with frequent floods have also promoted the growth of diarrhoeal organisms, increasing health risks (UNDP and others, 2005).

6. The export of unprocessed natural resources is another area of concern in the subregion. Instability and adverse price trends drive countries to exploit more resources to meet their domestic and foreign obligations, including debt servicing, at the expense of the long-term sustainability of resources. Mineral resources present additional challenges, particularly where their exploration and exploitation is destructive to the environment. The fact that mineral revenues are used neither transparently nor accountably also breeds corruption poor governance. In Uganda, for

instance, oil exploration and future exploitation could present serious environmental challenges if not well managed. In Burundi, the mere knowledge of the presence of uranium deposits has bred instability. This has been exacerbated by the availability of conflict diamonds across in the Democratic Republic of the Congo (DRC), which sustain insurgents who continue to destabilize the country.

(e) Environment for peace and security

Peace is a prerequisite for human development and effective environmental management. It is also critical to the achievement of national and regional goals, such as those of NEPAD and its environmental action plan and the globally agreed MDGs. NEPAD, which focuses on promoting economic development with a view to eradicating poverty and placing countries, individually and collectively, on a path of sustainable growth and development, recognizes the importance of peace.

The critical role of peace in sustainable development is reflected by the number of peacebuilding and conflict prevention initiatives put forward by the Intergovernmental Authority on Development (IGAD). IGAD has a specialized division that is mandated to deal with issues of peace, security and humanitarian affairs through three main programme components, namely conflict prevention, management and resolution, political affairs and humanitarian affairs.

As part of its mandate the division, has developed regional strategies on peace and security and disaster risk management. It has also established and coordinates two institutions -the IGAD Capacity-building Programme against Terrorism, and the Conflict Early Warning and Response Mechanism. Both institutions are based in Addis Ababa, Ethiopia, and are key components of the IGAD peace and security agenda. IGAD is also in the process of establishing national early warning units which will be responsible for rapid response at the national level.

The IGAD peace and security programme coordinated the implementation of the Sudan Comprehensive Peace Agreement and has been active in reconciliation initiatives in Somalia, including developing a counter-terrorism strategy and coordinating and contributing to the establishment of the Eastern Africa Standby Force. IGAD has supplemented its peace and security activities with various disaster risk management activities including management of avian influenza and humanitarian settlement and support to forcibly displaced persons in the subregion.

(f) Regional integration processes and sustainable development

Regional integration instruments are critical to the implementation of sustainable development. They are expected to deepen social and economic cooperation, promote intraregional trade and encourage joint action to tackle transboundary environmental, social and economic problems, including climate change. Three major regional integration bodies are recognized in the Eastern African subregion: COMESA, EAC and IGAD.

COMESA is a free-trade area with a current composition of 19 member States stretching from Libya to Zimbabwe. COMESA was formed in December 1994 to replace the Preferential Trade Area for Eastern and Southern Africa which had existed since 1981. Nine of the member States of COMESA formed a free-trade area in 2000 (Djibouti, Egypt, Kenya, Madagascar, Malawi,

Mauritius, Sudan, Zambia and Zimbabwe), with Rwanda and Burundi joining in 2004 and the Comoros and Libyan Arab Jamahiriya in 2006. In 2008, COMESA agreed to an expanded free-trade zone to include members of two other African trading blocs, EAC and the Southern African Development Community.

IGAD was created in 1996 to supersede the Intergovernmental Authority on Drought and Development, which was founded in 1986 to respond to the severe and recurrent droughts and other natural disasters of the 1970s and 1980s through a regional approach to supplement national efforts. The original member States were six countries in the Horn of Africa – Djibouti, Ethiopia, Kenya, Somalia, Sudan and Uganda. Eritrea became the seventh member after attaining independence in 1993. In April 1995, the organization's Assembly of Heads of State and Government decided to revitalize the original structure and expand cooperation among member States, and the new IGAD, with expanded areas of regional cooperation and a new organizational structure, was launched by the IGAD Assembly of Heads of State and Government in November 1996 in Djibouti.

IGAD operates through a variety of mechanisms, networks, processes, specialized institutions and partnerships. Aside from the Conflict Early Warning and Response Mechanism already mentioned, IGAD has established the IGAD Business Forum in Kampala, the IGAD Climate Prediction and Applications Centre in Nairobi and the IGAD Capacity-building Programme against Terrorism in Addis Ababa. IGAD and COMESA are also working together to promote joint programmes on trade to avoid duplication of efforts and resources.

The East African Community (EAC) is a regional intergovernmental organization covering the five East African countries of Burundi, Kenya, Rwanda, Uganda and the United Republic of Tanzania. It was established by treaty in 2000 following ratification of the treaty by the original three partner States of Kenya, Uganda and the United republic of Tanzania. Burundi and Rwanda acceded to the EAC Treaty on 18 June 2007 and became full members of the community with effect from 1 July 2007. The community progressed from a free-trade area a customs union in July 2005. It has since transformed into a zero-tariff trading bloc, aiming to progress to a monetary union by 2012.

EAC has a number of organs and programmess of relevance to sustainable development. They include an East African Legislative Assembly, the East African Court of Justice and the East African Business Council. These organs have been instrumental in establishing joint programmes, institutions and processes including the Lake Victoria Basin Commission, the Lake Victoria Fisheries Organization and a regional protocol on the management of natural resources, under which joint environmental impact assessment guidelines for transboundary fragile ecosystems were developed. In October 2011 EAC launched a sectoral council on natural resources, which will implement the Community's strategy on climate change and other programmes and strategies supportive of sustainable development.

EAC has also facilitated and promoted regional investment in transport and communications, including the East African Road Network project and in the energy sector the Power Master Plan, with the ultimate purpose of establishing a fully-fledged regional energy pool. Several East African stock exchanges have also been established to raise local finances and intermediate capital.

(g) Financing sustainable development

Chapter 33 of Agenda 21 discusses the financial resources and mechanisms necessary to achieve sustainable development targets. The stipulated cost of sustainable development is about US$ 625 billion a year including approximately US$ 125 billion in additional financial transfers from North to South. Agenda 21 recognizes that the main source of financing sustainable development at the national level is internal private and public sector resources. Agenda 21 also recognizes that in a world of wide economic disparities and externalities, substantial new and additional resources are needed to assist the poorest of the developing countries to implement sustainable development.

Official development assistance (ODA) is recognized as the main source of external financing for developing countries. Agenda 21 also emphasizes the importance of debt relief for the highly indebted poor countries, as well as the need for internal policy reforms to mobilize domestic resources for sustainable development. The potential for the use of economic instruments and other innovative mechanisms to generate additional resources has also been recognized.

Most countries in the region have improved their tax base and created tax authorities to mobilize domestic revenues for development. Many have undergone positive tax reforms targeting consumption, and have created a value added tax. Measures have also been taken to enhance transparency and public-sector management.

However, key challenges to domestic revenue mobilization remain. The tax bases of most countries are narrow, with large sectors of their economies still operating outside the formal taxable sector. There are also glaring weaknesses in tax administration. Yet businesses in the region already complain that their average tax burden is one of the highest in the world and cite it as one of the hindrances to business development.

The large tax exemptions and holidays introduced to attract foreign investment are also a big concern. They have been held responsible for the low total-tax-to-GDP ratio in the subregion. The success of tax exemptions in attracting private capital flows to the subregion is also a matter of contention. Foreign direct investment is slow to arrive and generally concentrated in a small number of mainly middle-income countries, and in activities likely to exacerbate conservation problems rather than help resolve them (mining, oil, logging, etc).

The recorded increase in private investment in the subregion should not distract attention from the continuing need for ODA and dedicated environmental funds to address the pressing needs of the majority of the countries in the subregion in the fields of biodiversity conservation and development. Greater efforts are needed to harness private funds for conservation and to ensure that private investment does not cause environmental damage.

Development partners have stepped up efforts on broader related issues of economic governance, including non-cooperative jurisdictions, transfer pricing issues and the taxation of minerals, oil and gas. However, many donors, including the Global Environment Facility, have still fallen short on their promise to provide 0.15 to 0.20 per cent of gross national income for least developed countries in the context of ODA. Aid effectiveness is also an outstanding challenge.

Key priorities for the future in the area of financing for sustainable development include action by governments in the region to strengthen domestic revenue mobilization and to attract investment. The countries also need to receive support from the wider international community to tackle the loss of tax revenue through offshore non-compliance and illicit financial outflows. And there is a need for action by development partners to deliver their 2005 commitments in full, improve aid effectiveness and accelerate the development of innovative sources of finance, including delivery of the short term and long-term climate finance agreed in the Copenhagen Accord and the Cancún Agreements.

2. Concrete actions taken, best practices, progress and achievements

A number of concrete actions have been undertaken at the legal, policy, institutional and implementation levels to pursue the sustainable development agenda. This section highlights some of the actions taken as well as best practices, progress and achievements. The purpose is to identify transformative actions that have high success rates and should therefore be scaled up in other areas.

In the area of wealth creation, several concrete actions have been undertaken, mostly emphasizing the importance of trade. The actions fall in three broad but interrelated categories, including those aimed at reducing supply-side constraints by improving competitiveness and fostering comparative advantage; those aimed at reducing trade barriers and facilitating trade; and those aimed at deepening regional integration.

The actions to improve trade competitiveness and foster comparative advantage include improvements in regional hard and soft infrastructure – roads, rail, air and water transport, and the policy and regulatory environment, the transparency and predictability of trade and business administration and the general quality of the business environment. The road interconnectivity projects, including the Bukoba-Mutukula road between Uganda and the United Republic of Tanzania, the Isiolo-Moyale road between Ethiopia and Kenya , and the Mombasa – Kampala – Kigali road improvements have all facilitated trade expansion in the subregion. The proposed rehabilitation of the East African Railways system is another critical project that will significantly improve export competitiveness.

Article 13 of EAC Customs Union Protocol obliges partner States to abolish non-tariff barriers. The major non-tariff barriers in the subregion include requirements under Kenya's electronic cargo tracking system, Kenya's import declaration forms and their associated costs, local council fees for transit cargo in Kenya and the United Republic of Tanzania, multiplicity of weighbridges and variable gross vehicle mass requirements, roadblocks, plant import permit charges and non-harmonization of sanitary and phytosanitary certification. Rwanda recently took practical steps to dismantle non-tariff barriers by abolishing roadblocks and reducing the number of weighbridges cargo trucks have to go through. This facilitated the import of goods to Rwanda and onward to Burundi and the Democratic Republic of the Congo.

EAC also recently established a Standards Committee to harmonize standards in the Community. Harmonized standards eliminate technical barriers to trade a freer flow of goods and services, boost trade and also protect the health and safety of consumers and the environment.

Mobile phone roaming interconnectivity is another important trade – promoting action in the region. Several mobile phone companies, including Airtel and MTN, launched borderless connectivity across East Africa after realizing that roaming interconnectivity is crucial for many people whose family, social and business relations extend beyond political borders. This connectivity enables subscribers to use their phones in any of the countries (except Burundi) to make calls at local rates without roaming surcharges, as well as to receive incoming calls free of charge and to recharge their pre-paid accounts with any of the local top-up cards.

A number of steps have also been taken to deepen regional integration. IGAD carried out a study on the harmonization of investment codes in the region with a view to developing common and mutually supportive instruments on investment promotion. It has also developed a regional infrastructure development strategy on roads and information and communications technologies, and planned the Mombasa-Nairobi-Addis Ababa Road Corridor via Isiolo and Moyale, in partnership with the Governments of Ethiopia and Kenya and AfDB. IGAD has also developed a regional framework for monitoring HIV/AIDS and prepared sectoral strategies for industry and tourism, as well as for transport and communications. It also provided training for its member States on negotiation skills, and plans to embark on macroeconomic initiatives aimed at deepening regional integration programmes.

The main purpose of the IGAD Climate Prediction and Applications Centre, mentioned above, is to provide climate information, prediction products and services for early warning and related applications so as to reduce climate – related risks for the purposes of disaster management, environmental management and poverty reduction in support of the sustainable development efforts of member States.

The IGAD secretariat facilitated the development of a regional food security strategy which began to be implemented in 2003, within the framework of the African Union-NEPAD Comprehensive Africa Agricultural Development Programme. Under the strategy, member States committed to raise the share of their national budgets allocated to agriculture to 10 per cent, targeting annual growth in the agricultural sector of at least 6 per cent. In Uganda, for instance, a Plan for Modernisation of Agriculture and a National Agricultural Advisory Services programme are being implemented to improve agricultural sector contributions to the economy. Uganda's organic agriculture, a good example of a green economy opportunity, can be specifically targeted for scaling up under the various funding modalities.

EAC launched a common EAC passport together with Community-wide entry/departure cards for travellers and harmonized procedures for the issue of work permits. EAC citizens are now entitled to visa-free entry to member countries, which has reduced administrative burdens facing some migrants. The common EAC passport, valid only within the Community, entitles the holder to an automatic six-month multiple visa to any EAC member country. There are plans to upgrade the passport for use beyond the Community's borders.

Key actions in the areas of agriculture, food security and climate change at the subregional level include the development of a regional climate change policy and strategy a good example of a regional and integrated approach to the challenge of climate change. Both the strategy and the policy aim to guide partner States and other stakeholders in the preparation and implementation of collective measures to address climate change in the region, while assuring sustainable social and economic development. The advantages of the regional approach are that skills across the region can be tapped for the mutual benefit of the partner States. The various levels of implementation offer those involved opportunities to learn from one another, with possibilities of technology transfer where necessary and appropriate.

A potential area for successful technology transfer is the irrigation subsector. The subregion could benefit from promotion of the use of low-head, low-cost drip irrigation kits for smallholder farms, mainly for vegetable production, as currently used in Ethiopia, Kenya and Uganda. These

range from 20 – litre bucket kits to 200 – litre drums or mini-tank systems and operate at 0.5-1 metres water head to irrigate up to 2,000 square metres of farmland. Besides being affordable, the kits promote the efficient use of scarce water and fertilizer, improving yields and the quality of crops. The adoption of these integrated micro-irrigation systems has enhanced food security, raised incomes and provided considerable mitigation against the adverse effects of climate change (Ngigi, 2009).

The Eastern Africa subregion experiences both spatial and temporal rainfall variability, which is expected to worsen with climate change. The use of rooftop water harvesting technologies in Kenya, Uganda and the United Republic of Tanzania, particularly for domestic purposes, can forestall water shortages. The prime advantages of the technologies are that they deliver water of reasonable quality at the doorstep and involve low maintenance costs. The technology can also be upgraded to support small-scale irrigation.

Other best practices identified during the review include MDG-based planning models in Ethiopia and the United Republic of Tanzania. MDG-based planning recognizes the indissoluble link between the MDGs and social development. There is overwhelming evidence to show that the modest progress made in the social sectors in Ethiopia and the United Republic of Tanzania is attributable to the MDG-based planning models adopted in the two countries during the development of their Poverty Reduction Strategy Papers. Key health indicators including life expectancy show that infant and maternal mortality rates for the two countries have improved considerably.

Other specific actions adopted in the social sectors in the subregion include Ethiopia's safety net programme targeting food-insecure and poor households to raise school enrolment rates; Kenya's legislation securing the property and inheritance rights of HIV/AIDS orphans; and the United Republic of Tanzania's laws that recognize women's access to land and also provide them with credit to develop land. Eritrea has established strong partnerships to address health issues. Seychelles, which has performed well in terms of poverty eradication, has enshrined protection of the poor in its Constitution.

At the subregional level, IGAD has a regional HIV/AIDS programme which seeks to address the cross-border mobile populations and, through a regional mapping exercise to identify gaps in health interventions geared to mobile populations.

A number of practical steps have also been taken in the area of environment for sustainable development, mainly aimed at maintaining or enhancing the integrity of the land, water and air components of the environment, as well as controlling pollution and combating desertification while raising agricultural production. The use of leaded petrol was eliminated in the subregion by the end of 2006, ahead of Europe. This was achieved through concerted networking between the public and private sectors. Solid waste management in many cities in the subregion has also been dramatically improved by engaging local private – sector partners in waste collection and disposal.

In the energy sector, several programmes are aimed at developing more efficient solutions harnessing renewable energy sources that are abundant across the subregion. Donor financing for feasibility studies, as well as pilot and demonstration projects on renewable energy and

energy efficiency, have been initiated. The Energy and Environment Partnership programme with Southern and East Africa supports renewable energy activities that promote the use of alternative fuels to achieve energy efficiency, and also supports feasibility studies on reliable and affordable renewable energy solutions for rural areas.

Most countries in the subregion have introduced environmental impact assessment as an integral part of all investment decision procedures. This process aims to predict the environmental, social and economic impacts of developments with a view to preventing or mitigating the negative impacts of each development or enhancing the positive impacts. At the subregional level, the EAC secretariat developed and is implementing regional guidelines on environmental impact assessment in relation to shared ecosystems in East Africa.

In the area of environmental assessment and reporting, the state-of-the-environment report process has been adopted by many countries in the subregion, with the support of UNEP. This is an important tool that keeps under review the dynamic relationship between the economy and the state of the environment in each country. These reports regularly discuss the changing relationship between the economy and the environment, the factors that affect the environment and the state of natural resources before analysing future scenarios under different development paradigms. In each report, the outlook section enables policymakers to make informed choices on which development paths to adopt. National state-of-the-environment reports were supplemented by regional environmental outlook reports, including one from IGAD intended to ensure integrated environmental management. It is expected to be followed by a state–of-the-environment report for the IGAD region, focusing mainly on environmental resources, which are assets for sustainable development in the region. The Environment Outlook report will look into the root causes of environmental deterioration and depletion of natural resources and recommend possible solutions.

Lately, atlases of the changing environment have been popularized. These provide a compelling impression, using pictures, maps and other graphics, of the impact of development on the stock and quality of the environment and natural resource base.

A number of actions that have strengthened the planning and environmental integration processes in the region have also been identified. They include the practice of setting out a vision, a mission and objectives in national medium-term planning processes. In order to present comprehensive visions and missions, most planning processes in the region are now consultative and participatory in nature and capture inputs from the grass roots. Planning reforms have also promoted the development of sector-wide plans, including the environment and natural resource sector-wide approach to planning, water and environment sector-wide plans, land sector strategic plans, etc., which require sectoral working groups to deliver implementation and monitor progress.

The decentralization of environmental management to the district and lower levels of government has allowed for greater involvement of the public in decision-making. It has also facilitated the testing of grass-roots sector-wide planning techniques like the District Environment Action Plan processes.

3. Implementation challenges and constraints

The key challenges and constraints involved in achieving sustainable development in the Eastern African subregion are many. For the purpose of this review, however, five clusters of challenges and constraints will be discussed: financial and economic constraints, technological issues, policy and institutional challenges, sociodemographic challenges and climate change.

As indicated in earlier sections, the Eastern African subregion has enjoyed fast economic growth in the Past decade, partly owing to improved economic management and strong global demand for the its exports. However, despite such success, the subregion faces widespread poverty, which is an immense challenge to sustainable development. Many countries in the subregion have failed to sustain the high annual GDP growth rates (at least 7 per cent) that are required to take people out of poverty. High growth rates can be sustained only by increased production by an effective, strong and vibrant private sector – something which is lacking in the region, particularly in the export sector.

The rapid increase in food and energy prices in the subregion after 2009 caused a severe food crisis. This has exacerbated the poverty situation in the subregion. Growth rates have plummeted, unemployment is rising, poverty is deepening, hunger and malnutrition are on the increase again and achievement of the MDGs is in jeopardy (United Nations 2008).

The region also lacks critical technical implementation capabilities. The shift to new and sustainable approaches to production, distribution and consumption requires whole sets of specialized human, knowledge, logistical and technical resources. Many of the countries in the region lack the appropriate resources. The technology transfer and support promised at various conferences and meetings has also not been forth-coming, implying that the rate of change is slow.

The subregion also lacks coherent policy and institutional resources to create the relevant infrastructure and manage the inevitable trade-offs in the water, energy and agriculture subsectors. Most countries also lack the necessary institutional mechanisms for the coordination of National Strategies for Sustainable Development. While all the countries in the subregion have statistical offices that monitor the various aspects of the economy, society and environment, none has developed an integrated set of indicators to allow analysis of the inherent trade-offs and interlinkages among the economic, social and environmental dimensions of sustainable development. There is also no mechanism to link sustainable development visions and objectives to actual national budget processes. Most sustainable development initiatives remain at the periphery of government decision-making.

Another major challenge to sustainable development is the HIV/AIDS pandemic. The first AIDS cases in the subregion were reported in the early 1980s, and the pandemic has since escalated. There are many cultural factors that promote the spread of the disease. Known risk factors include the presence of sexually transmitted diseases, multiple sexual partners and harmful traditional practices, such as female genital mutilation, bloodletting, skin-cutting and piercing practices.

HIV/AIDS presents a serious challenge to sustainable development. Sustainable development and HIV/AIDS have a far-reaching interaction. The disease threatens the loss of indigenous knowledge by creating a lack of continuity between generations, which is of paramount importance in environmental conservation in particular, and sustainable development in general. More importantly, poor environmental conditions may aggravate the situation of AIDS patients. HIV/AIDS must therefore be addressed in the context of environmental quality, and vice versa.

Climate change is the other very serious threat to sustainable development. Climate change undermines sustained economic growth and poverty reduction, the quality of life and political stability in most countries in the subregion. Most parts of the Eastern African subregion are expected to experience lower average annual rainfall and increased aridity and droughts. The combination of lower rainfall and higher temperatures is expected to result in a net drying and increased aridity for a large proportion of the region. Yet the region contributes less than any other to emissions of greenhouse gases. The region is also extremely vulnerable to the impacts of climate change as a result of poverty, poor infrastructure, high illiteracy rates, over exploitation of natural resources, conflict and high dependence of on climate-sensitive activities, including agriculture.

The fourth assessment report of the Intergovernmental Panel on Climate Change, produced in 2007, projected that by 2020, water stress due to climate change will be a critical development problem, and, coupled with increased demand, will adversely affect livelihoods and exacerbate water-related problems. Precipitation, the length of growing seasons, yield potential and the area suitable for agricultural production are projected to decrease as a result of climate change. The negative impacts of climate change include reduced food security and increased food shortages, as well as adverse impacts associated with extreme weather conditions such as floods and droughts. Sectors most at risk are water, infrastructure, health, energy and agriculture. The cost of adaptation, estimated at US$ 20 – 30 billion per year over the next 10 to 20 years, will be unbearable to poor countries in the region.

4. Interlinkages between the economic, social and environmental pillars of sustainable develpment

The World Summit on Sustainable Development recognized the three components of sustainable development as interdepende and mutually reinforcing pillars, hence the emphasis placed on promoting their balanced integration. Various global and regional responses to the decisions of the Summit individually and collectively provide opportunities for enhancing synergies and promoting interlinkages in addressing Eastern Africa's development challenges. These responses have called for the establishment of institutions and the development of policies and strategies that promote holistic and integrated approaches. The Eastern African subregion has responded with varying degrees of success. Institutional reforms are progressively being undertaken, and sustainable development strategies are being developed and implemented at various levels. In view of the many challenges, however, more effort is needed if the objective of positioning the countries of the region individually and collectively on a sustainable development path is to be achieved.

The need to focus on the interlinkages and interdependences between the three pillars of sustainable development moved to the centre of policy concerns with the 1987 report of the World Commission on Environment and Development, *Our Common Future*. The report emphasized that no region of the world faces separate challenges: "an environmental crisis, a development crisis, an energy crisis. They are all one".

The links between challenges in different sectors are the basis of a sustainable development or interlinkages approach. In making the case for such an approach nearly two decades ago, and long before the term became a household name, the Brundtland Commission's visionary and agenda-setting report identified the relationship between different sectors and the need for planning, decision-making and policy frameworks that take account of these links.

The interlinkages between the economic, social and environmental pillars of sustainable development cannot be addressed by fragmented institutions and policies. Holistic institutions embracing transdisciplinary competences and approaches have to be developed to advance the sustainable development agenda. Economics and ecology must be completely integrated in decision-making and law-making processes, not just to protect the environment but also to protect and promote development. Environmental problems are never strictly linear, even though some cause-and-effect relationships can be shown, but are part of a complex web of interactions.

Deforestation, for example, is not just about trees, but also about changing forest landscapes and ecosystems, which has implications for biodiversity and water catchment management. Deforestation may increase run-off, thus accelerating soil erosion and siltation of rivers and lakes. It may also affect soil fertility. In addition to those biophysical interactions, there are also links between forest changes and human society. Deforestation may be the product of multiple and interlinked changes in human society, including lack of livelihood options, new pressures brought about by demographic changes, an economic environment that does not support-value adding activities and thus results in ever higher levels of harvesting, and so on.

Deforestation may also affect human well-being by closing some opportunities, threatening cultures and knowledge systems closely related to forest resources, undercutting agricultural and livestock productivity and increasing poor health as access to medicinal plants, wild meat and wild fruits that supplemented local diets is lost. Understanding and integrating the interlinkages between the pillars of sustainable development in policy and decision-making, thus has a large potential to improve policy coverage and effectiveness.

5. Institutional and strategic frameworks for sustainable development in the subregion

Agenda 21, the comprehensive and detailed programme for sustainable development, and JPOI both called upon countries to establish National Councils for Sustainable Development (NCSDs) and National Strategies for Sustainable Development (NSSDs). The purpose of the Councils and Strategies is to reduce fragmentation and foster the integration of all three dimensions of sustainable development in national socio-economic development frameworks.

In response to the two instruments, the Eastern African subregion has embraced a number of organizational and institutional reforms to enhance sustainable development and promote convergence between regional and national economic, social and environmental goals since 1992. The reforms were introduced at the regional, national and local levels, and aimed at creating and benefiting from synergies and programmatic interlinkages. Although the focus of this report is subregional, interactions with global and Africa-wide institutions and processes cannot be overlooked because they provide the context within which the subregional, national and local institutions operate.

The United Nations system, including the General Assembly, UNEP, UNDP, and its various commissions and committees, provides the high-level global institutional architecture for the operationalization of sustainable development in the region. The General Assembly, for instance, has consistently taken a forward-looking position on the sustainable development agenda, having convened the United Nations Conference on the Human Environment in 1972, the United Nations Conference on Environment and Development 1992, its own special session to review and appraise the implementation of Agenda 21 in 1997, WSSD in 2002 and now the United Nations Conference on Sustainable Development in 2012.

UNEP is responsible for environmental issues at the global and regional level. Its mandate is to coordinate the development of an environmental policy consensus by keeping the global environment under review and bringing emerging issues to the attention of governments and the international community for action. It focus is to would – system wide views on environmental matters, shape the environmental agenda, including at the national level, promoting concrete joint action by all agencies and the secretariats of multilateral environmental agreements, through such bodies as the Environment Management Group, and catalyse partnerships for implementation at both the global and local levels. It also provides broad policy advice and guidance to promote international cooperation in the field of the environment.

UNDP focuses on development and hosts the network of Resident Coordinators, the United Nations Multi-donor Trust Fund Office and the United Nations Development Group. It is an advocate for change and connects countries to knowledge, experience and resources to help people build a better life. Environment and energy are among the four areas of work in the current UNDP strategic plan.

With specific respect to institutional indicators, NEPAD was developed and adopted at the regional level as an integrated sustainable socio-economic development framework for Africa. NEPAD reflects African leaders' common vision and shared commitment to eradicating poverty

and to placing their countries, both individually and collectively, on the path of sustainable development. Its objectives accord fully with the international commitments to reach the MDGs, in particular the goal of halving extreme poverty by the year 2015.

EAC and IGAD are economic communities in Eastern Africa set up to further integrate the socio-economic development efforts of the countries in the subregion. IGAD was created in 1996 to supersede the Intergovernmental Authority on Drought and Desertification (IGADD), which was founded in 1986. The focus of IGAD is regional integration. The key mandate is to assist and complement the efforts of the member States to achieve, through increased co-operation: food security and environmental protection; promote and maintain peace, security and humanitarian affairs; and economic cooperation and integration. EAC was inaugurated in January 2001. Based on the IGAD Summit Decision of June 2008, IGAD has embarked on the development of a Free Trade Area (FTA) for its region. A study was completed to be tabled to the following summit in November 2011. It has also developed strategies on migration and free movement of people.

The focus of EAC is on widening and deepening the integration process among the five partner states of Burundi, Kenya, Rwanda, Uganda and the United Republic of Tanzania particularly through a customs union, and eventually political federation. The EAC strategy emphasizes economic cooperation and development with a strong focus on the social dimension. The role of the private sector and civil society is considered central and crucial to regional integration and development in a veritable partnership with the public sector.

The Treaty for the Establishment of the East African Community recognizes that development activities may have negative impacts on the environment, often leading to degradation and depletion of natural resources, and that a clean and healthy environment is a prerequisite for sustainable development. It therefore provides for the joint management and utilization of natural resources within the Community for the mutual benefit of the partner States. It also provides for the joint development of harmonized common policies and strategies for sustainable development, especially of transboundary natural resources within the community. Within this framework the EAC secretariat has developed regional guidelines on environment impact assessment in relation to shared ecosystems in East Africa.

Following the publication of an ECA study on NCSDs in Africa, national institutional arrangements for coordinating sustainable development have evolved in the subregion. Countries recognized the important role of these bodies and the need to strengthen national institutions to coordinate and promote sustainable development. Many of the institutions performing these coordination roles, however, do not adequately fulfil the role of NCSDs, owing to their environmental bias.

Regarding strategic frameworks, the countries in the subregion have developed diverse types of plans to promote sustainable development. The plans are variously known as national development plans, poverty reduction strategies, national long-term visions or national strategies for sustainable development (NSSDs). They share the common characteristics desired of sustainable development strategies, though they are not fully-fledged institutions for sustainable development. No institutions on strategic frameworks fully satisfy the description of the institutional and strategic frameworks in Agenda 21 and JPOI. In Uganda, however, initial steps

to set up a national sustainable development think tank as a multi sectoral and cross-sectoral forum to champion sustainable development constitute a welcome idea that could be replicated elsewhere in the subregion.

Overall, therefore, the implementation of NSSDs in the subregion is generally weak and ineffective due to the inadequate institutional capacity. Poor data and weak priority –setting are other key constraints. These have been compounded by the limited political voice and budgetary resources of environment ministries, where most initiatives are concentrated. The existing institutional architecture for sustainable development in the subregion remains incoherent, fragmented, inefficient, ineffective and lacking in synergy. The full integration of all the pillars of sustainable development also remains an unachieved target.

At the subregional level, no separate sustainable development strategies could be discerned, and sustainable development issues are addressed within the framework of policies, programmes, projects, plans and activities. In this regard, the IGAD environment and natural resources strategy enhances, as a primary objective, the integration of environment and natural resource concerns into other development frameworks for the subregion. The strategy and establishes links with other programmes and processes, including those on food security, gender, peace and security and environmental information. However, it lacks an effective and efficient institutional mechanism for adequately integrating social, economic and environmental considerations in the subregion. The strategy dwells in a more significant way on the sustainable management of the regions' environment and natural resource base, without adequately articulating the necessary trade-offs and harmonization with the other pillars of sustainable development.

A similar situation can be observed at the EAC level. EAC also addresses sustainable development issues within the general framework of policies, programmes, projects, plans and activities. It has developed a number of policy documents including the Treaty, a protocol on environment and natural resource management and the EAC development strategy, which address sustainable development issues. However, they do not articulate a specific EAC institutional framework to spearhead sustainable development in a holistic and integrated manner.

Hence the state of affairs in the subregion implies that there are many of duplication and poor coordination among institutions. This imposes a heavy burden on the resources of the countries in the region. These countries scored less than 55 points on the 2010 Environmental Performance Index, which ranks 163 countries over 25 performance indicators that assess performance against established environmental policy goals. Eritrea performed best with 54.6, followed by Kenya with 51.4, Uganda with 49.8, Madagascar with 49.2, the United Republic of Tanzania with 47.9, Rwanda with 44.6, Burundi with 43.9 and Ethiopia with 43.1.

6. Transition towards a green economy

In the past few years, mounting evidence of global environmental degradation has convinced most of the world's political leaders that the planet faces a serious crisis. The nature and extent of the crisis has been the subject of several conferences, speeches and declarations. But economic policy and global development models have remained largely unchanged.

The economic status quo is rather surprising, since it is evident that the causes of environmental damage lie in economic activities – in agricultural and industrial production, in the consumption of energy and the discharge of waste. There is abundant evidence that the scale and pattern of these activities is responsible for the pollution and exhaustion of natural resources now causing so much alarm. Tackling the current environmental crisis clearly, requires a total change of economic policy, and along with it, the patterns of production, distribution and consumption.

A number of models to define new approaches to economic policy have been proposed in the past. The most appealing one so far is that of the "green economy". UNEP defines a green economy as one that achieves improvement of human well-being and social equity while significantly reducing environmental risks and ecological scarcities (UNEP, 2010). The green economy is driven by green growth that relies on technologies and processes that save inputs including energy and natural resources. As such, green growth efficiently reduces climate change and damage to the environment. It also secures new growth engines through research and development of green technology, creates new jobs and achieves harmony between the economy and the environment. The key elements of green growth include setting clear greenhouse gas reduction targets and goals for green energy supply and efficiency – triggering green technologies and businesses, and, through these, improving the quality of life of people and the global community.

The increased rationale for the green economy is twofold. The first reason is climate change. Natural disasters, destruction of ecosystems, environmental degradation and pollution pose many threats to humanity. The fight against climate change is also formidable. To be able to tackle the numerous environmental challenges while simultaneously maintaining economic growth will require the economies in the region to shift to a low-carbon growth paradigm.

The other reason is the energy crisis and the depletion of natural resources. There is a need for countries to acquire alternative sources of energy, improve energy efficiency and promote the adoption of energy-saving lifestyles. They have to curb the use of fossil fuels and massively invest in clean and renewable energy sectors.

With respect to poverty eradication, the green economy model stimulates diffuse opportunities for business and investment by providing the means by which industry, civil society and government work together. This enables them to leverage their potential to create jobs, support workers through training and skills development, access financing, advance innovative technologies and influence the supply chain towards greener methods of production. The green economy model improves and enlarges businesses and provides new opportunities. It also meets the growing demand energy-efficient, eco-friendly products, and therefore supports green markets.

To implement the regional vision of green growth effectively, national governments must develop medium-to-long-term strategies for green growth. The strategies envisage are directed towards five main objectives. The first is to promote integrated environmental and economic accounting, which is a planning tool that reconciles social and economic development with environmental sustainability. Carrying out strategic environmental assessments would also facilitate progress towards sustainable development. The second objective is to deal effectively with climate change and attain energy independence. This objective calls for actions such as setting mid-to-long-term mitigation goals, increasing the use of new and renewable energy sources and pursuing efficient demand-side management for energy and other input sectors.

The third objective is to create new engines of growth on various fronts, including the development of green technologies, the greening of industry, the transition to a more advanced and cleaner industrial structure, and laying the ground for a green economy. The integration of the practices and principles of corporate social responsibility into business operations can help companies contribute to the realization of a green economy. This aspect of sustainable development planning should form the fourth objective of the strategy for green growth in the subregion.

The fifth objective is to raise the overall quality of life for the people and to enhance the contribution to the international community through strong advocacy for green growth. International advocacy has, however, to be cascaded to the local national level, with the development of programmes that will inculcate the key tenets of the green revolution in people's minds and lives. Hence school curricula must be transformed to reflect green thinking. Other actions include the development and monitoring of a green lifestyle index, carbon footprint labels and certifications, promotion of low-carbon smart village movements and promotion of ecological tourism.

The subregion has demonstrated a number of initiatives that could be refined and scaled up. In agriculture, food security and climate change, for example, the organic agriculture initiative in Uganda should be studied, refined and scaled up. In the energy sector, biofuel projects in Ethiopia, the United Republic of Tanzania and Uganda offer opportunities for growth based on green energy. Hydro and other renewable energy projects, including the Ethiopian regional interconnection grid project to Djibouti, offer other opportunities. Forest environment and natural resource accounting studies have also been undertaken in Ethiopia and Uganda to provide an indication of the contribution of the sector to economic growth. The information is important in forest resource management and enhancing the role of the green economy in social transformation.

The subregion has demonstrated readiness to embrace the green economy. However, a number of enabling conditions that need to be addressed have been highlighted. These include provision of the necessary financial resources to fund the transition to a green economy as well as the need to establish the correct legal and tax regime to support the transition. Economic transformations to provide the necessary markets and incentives including through targeted subsidies, were mentioned as other necessary steps.

7. New and emerging challenges

The Eastern African subregion faces a number of emerging challenges to sustainable development, including climate change, increasing water scarcity, the global financial crisis, halting progress towards the MDGs, the global food crisis, escalating food prices, the energy crisis, biodiversity loss and the degradation of marine, freshwater and other important ecosystems, inefficient and wasteful patterns of consumption and production and frequent natural disasters.

These challenges are evident in all the countries in the subregion, albeit to different extents. This review also noted that different countries varied in their ability to cope with the risks and shocks associated with the challenges. In many cases, the challenges have been further exacerbated by poverty, competition for scarce resources, the rapid pace of rural/urban migration and the concomitant challenges to provide food, infrastructure and access to basic health, water and energy services. Meeting these challenges has put immense pressure on the meagre resources in the region, and international support must be provided to maintain the region's pursuit of sustainable development. The sustainable development challenges posed by climate change, for instance, illustrate well the importance of a holistic response from the international community.

Climate change is referred to as the greatest environmental challenge facing the present generation. It impacts many sectors, affecting livelihoods and the socioeconomic development process across the Eastern African subregion. All the countries in the subregion have already experienced the negative impacts of climate change, such as rising temperatures, changing rainfall patterns, disruption to the farming calendar, extreme weather conditions, droughts, floods, cyclones and landslides. Rising temperatures have led to the melting of the permanent glaciers on the region's high mountains of Kenya, Kilimanjaro and the Ruwenzori range, leading to undesirable changes in the local microclimate, crop cycles and river flows. The chain of impacts of climate change is illustrated by the River Semliki on the border between the Democratic Republic of the Congo and Uganda. Melting snow on the Ruwenzori range contributes to an increased flow in the river, leading to riverbank erosion, shifts in the course of the river and eventual siltation of Lake Albert, into which the river flows.

Most of the countries in the region have formulated National Adaptation Programmes of Action to guide them in identifying resource requirements for mitigation and adaptation measures. For example, the programmes in Kenya, Rwanda and Uganda indicate the need for an average of US$8 million over three to five to address some of the most pressing challenges of climate change. Most of these funds have not been secured, and therefore the adaptation situation in most countries remains poor.

Some funding has, however, been obtained, for example for municipal solid waste composting projects in Uganda. A project led by the World Bank involves the construction and operation of solid waste composting plants in the nine municipalities of Fort Portal, Jinja, Kabale, Kasese, Lira, Mbale, Mbarara and Mukono. The project is based on the premise that by composting the solid waste into manure, it will be possible to control greenhouse gases like methane and thereby participate, through emission reductions (carbon) trading, in the Clean Development Mechanism of the Kyoto Protocol.

Water scarcity is another big challenge that many African countries have to grapple with. In addition to domestic water needs that include drinking water, water is required by such sectors as agriculture mining and power generation. Access to drinking water, while important and urgent, is a need in direct competition with those in other sectors. The fall in water levels in a number of lakes and rivers in the region has meant cutbacks in electricity generation, resulting in loss of revenue and jobs. Limited water storage capacity is a major factor influencing access to water in the region. The Eastern African subregion is one of the least developed areas in terms of water storage. It has a per capita storage capacity of about 100 cubic metres, compared to the global average of 1,000 cubic metres. Increasing storage options and improving to existing storage will address the challenges associated with infrastructural water scarcity.

The impact of the global financial crisis of 2009 is well documented. Economic growth rates in most countries dropped, while fuel prices and inflation has skyrocketed. Many economies in the Eastern African subregion initially weathered the impacts of the crisis. However, these impacts exerted their full force in 2010. The slowing of growth in the region is due to a number of reasons, including declining trade flows, the pressure of high fuel prices, low agricultural productivity due to drought and limited internal movement of food products owing to high transport costs. Capital inflows and remittances, which had been another driver of economic growth, also declined, further the in these inflows growth rate. Kenya, for example, saw a fall of more than US$ 20 million between October 2008 and January 2009. Tourism receipts that flow to Kenya's treasury declined by 13 per cent in the fourth quarter of 2008 compared to 2007, further reducing revenue inflows.

Most of the countries in the subregion have halted progress towards some of the MDGs**.** The MDGs that remain challenging are Goal 1, target 1C, on hunger, and Goals 4, 5, 6, 7 and 8. Hunger spiked in 2009 as a direct consequence of the global food and financial crisis. Food price increases and falling incomes resulting from the financial crisis worsened the food situation in the region. The Food and Agriculture Organization of the United Nations estimates that the number of people who were undernourished in 2008 was 915 million, but exceeded 1 billion in 2009. Aggregate food availability was relatively good in 2008 and 2009, but higher food prices and reduced employment and incomes meant that the poor had less access to that food. The region was also hit by drought resulting in a serious famine situation in northern Kenya and Somalia.

Many young people still lack knowledge to protect themselves against HIV. Whereas condom use during high-risk sex is gaining acceptance, many older people are reluctant to use condoms, and infection rates have therefore increased among married couples in the subregion. The rate of new HIV infections also continues to outstrip the expansion of treatment. The story for malaria is no better. Although the use of insecticide – treated nets has increased significantly across the region, the malaria belt has simultaneously expanded to new areas that were previously malaria – free. This has had a heavy toll on the populations there, and reversed the gains for this MDG target.

There is also a food crisis caused by the rapid escalation of food prices. The price of most staple foods in the region rapidly increased in 2007 and the first half of 2008 as a result of food shortages. The shortages have been attributed to droughts in grain-producing countries, reduced yields, diminishing cereal stocks as a result of the impact of climate change and multiple demands on existing stocks for human and animal consumption, as well as for biofuels. The increase in oil prices triggered an increase in transport and fertilizer costs which has further contributed to increases in food prices. The increasing use of biofuels in developing countries also intensified

cereal shortages. The result was a global food crisis that caused political and economic instability and social unrest in both poor and developed nations. Food prices dropped in the second half of 2008, but increased again in 2009/2010, peaking in early 2011 at levels higher than the 2008 levels. The global food crisis has been seen as a general wake-up call for the international community to revitalize agricultural production and trade, while rectifying systemic imbalances in those areas. Increases in food prices and food insecurity are responsible for pushing several million people deeper into poverty in the Eastern African subregion.

The Eastern African subregion largely depends on natural resources to achieve growth. It is therefore very vulnerable to climate change. Climate change and its impacts have significantly altered its development pathway. Global environmental change, including land degradation, loss of biodiversity, changes in hydrology and changes in climate patterns resulting from enhanced anthropogenic emissions of greenhouse gases have serious consequences for food security and growth in the region.

The other key emerging challenge in Eastern African is the energy crisis. The energy crisis has been largely precipitated by the unprecedented volatility in energy prices. The subregion, although endowed with abundant renewable energy resources including hydropower, geothermal and solar energy and bioenergy, imports large amounts of its commercial energy requirements. Energy prices in the subregion are therefore high, in line with global energy price trends. Furthermore, electricity supply is insufficient and unreliable, while power cuts are frequent and rarely scheduled. The situation has been worsened by climate change and the associated drop in water levels at most hydropower generation facilities in the region. Energy prices are also very high bearing in mind the relatively low levels of income of most people in the subregion.

A further challenge is the continuing loss of biodiversity. Expanding agriculture, clearing of forests for charcoal and firewood, climate change and desertification are the primary causes of loss of biodiversity. Permanent and long-term solutions to these challenges in the form of resources, capacity and policies are need to halt or reduce the rate of biodiversity loss.

Desertification is another serious challenge that impacts sustainable development in the subregion. Desertification is closely linked to poverty and directly impacts health, food security, natural resources and the environment. Djibouti, Eritrea, Ethiopia, Kenya and Somalia the Horn of Africa contain either desert or drylands. Desertification makes the area susceptible to land degradation, the area susceptible to land degradation and desertification is likely to increase as a result of climate change. Under a range of climate scenarios, it is projected that there will be an increase of 5-8 per cent in arid and semi-arid lands in the region. Estimates from individual countries report increasing areas affected by or prone to desertification.

Progress towards sustainable development in the subregion is also threaten invasive alien species, defined as plants, animals and microbes that have been introduced into an area from other parts of the world and have been able to displace indigenous species. Infestations of such species were mentioned during this review, and their impacts in undermining development and livelihood opportunities and increasing human vulnerability were discussed. Their wide-ranging financial and economic impacts merit specific policy focus.

Natural and man-made disasters were also recognized as increasing in frequency and ferocity. There is legitimate concern that natural disasters now undermine the subregion's prospect of reaching the MDGs. Climatic and hydrological hazards, in particular drought, floods, cyclones and landslides, dominate the disaster profile in the subregion, in addition to other natural and man-made disasters such as volcanic eruptions, epidemics and conflicts. The high incidence of disasters, particularly droughts and floods, threatens agriculture, food security and infrastructure.

Multiple and interdependent forms of vulnerability have the potential to transform even minor hazard events into human disasters. Particularly for the poor, who directly depend on agriculture for both subsistence and income, climate change increases the risk and exacerbates existing vulnerabilities by increasing the likelihood, frequency and severity of extreme weather events.

8. Conclusions and recommendations on the way forward

This report presents a well-informed statement on the progress made towards sustainable development in the Eastern African subregion. It highlights and effectively articulates the key sustainable development concerns and priorities in the subregion. The purpose of the report is to provide background information for the Rio+20 summit next year, with the ultimate aim of influencing the context and outcome of the summit.

Regarding economic growth and wealth creation, the report notes the good economic performance the region has enjoyed, particularly for the strong economies of Ethiopia, Rwanda, Uganda and the United Republic Tanzania. It highlights the key growth sectors of telecommunications, manufacturing, construction, mining and agriculture.

The report notes significant drops in key economic performance indicators since 2009. The economic slump is due to the volatile global financial and economic environment, exacerbated by drought, food shortages and overall low agricultural output. This significantly and negatively affected the employment situation in the subregion, since most people work in the informal and subsistence agricultural sector.

The report recommends a reconfiguration of the structure of production, distribution and consumption with a view to reinvigorating the economies in the subregion to create jobs, particularly green jobs for the large population of young people.

The report also highlights food security as another salient issue, with critical concern over falling agricultural productivity and escalating food prices. The report attributes the fall in agricultural productivity to environmental degradation and decreased soil fertility, drought, pests and diseases and flooding. It also notes that many farmers in the region do not apply the requisite soil and water conservation protocols, including the application of organic and inorganic fertilizers. The report further raises concern over the emerging issue of leasing of large tracts of land by foreign countries for their own food production. It concluded this section by recommending specific investment in irrigation and research and development in line with the African Union-NEPAD Comprehensive Africa Agriculture Development Programme.

It was noted that poverty aggravates the food security problem. Subsistence farmers grow food for home consumption and sale. Any agricultural disaster therefore denies them both subsistence and income. Whereas relative poverty has diminished in the subregion, poverty levels remain high. Progress on the other human development indicators of child and maternal mortality, HIV/AIDS and malaria has been equally poor. There was movement towards MDGs 2 and 3 on universal primary education and women's empowerment, although some people wondered how to reconcile the empowerment of women with high child and maternal mortality.

Progress towards MDG 7 on environmental sustainability continues to be poor. There is rampant land degradation and soil fertility loss, loss of biodiversity, destruction of watersheds and increasing water scarcity in spite of the participation of all the countries in the region in international forums

and decisions on environmental protection. Recent improvements in environmental reporting (particularly through the atlases of the changing environment) have highlighted critical challenges in the field of environment and sustainable development in the region.

Financing sustainable development remains a critical challenge, particularly in the context of the global economic slowdown. Key priorities for the future include action by governments in the region to strengthen domestic revenue mobilization and to attract investment. The countries also need to receive support from the wider international community to tackle the loss of tax revenue through offshore non-compliance and illicit financial outflows. They need development partners to deliver their 2005 commitments in full, to improve aid effectiveness and to accelerate the development of innovative sources of finance, including delivery of the short-term and long-term climate finance agreed in the Copenhagen Accord and the Cancun Agreements. The potential role of the private sector was also recognized. Private-sector resources must also be tapped, and above beyond the token contributions made by private-sector players in the name of corporate social responsibility.

Having highlighted priority sustainable development issues and trends and identified best practices, concrete actions, progress and achievements, the report proposes a number of measures to speed up the achievement of sustainable development in the subregion. The proposed measures embrace the concept of the green economy in the context of sustainable development and poverty eradication and the institutional framework for sustainable development.

The subregion must embrace and deepen regional integration, foster private-sector growth and address supply-side constraints including poor telecommunications, transport, energy, labour quality and raw material supplies. The subregion must also invest in research and development, agricultural development and climate change mitigation and adaptation.

The inextricable link between the MDGs and social development necessitates a more concerted effort in addressing the MDGs. There is evidence to show that countries that have addressed the Goals have continued to make progress in the social sectors. For example, countries that have instituted measures to address health MDGs have seen improvements in life expectancy and overall health conditions. MDG-based planning was cited as a success story in a number of countries in the subregion.

Lack of integration of the pillars of sustainable development in the subregion implies that the legal, policy and institutional landscape remains incoherent, fragmented, inefficient, ineffective and lacking in synergy. To address this shortcoming, governments must develop medium–to-long-term strategies for green growth in the context of sustainable development and poverty eradication. The strategies envisage five main objectives: to promote integrated environmental and economic accounting, which is a planning tool that reconciles social and economic development with environmental sustainability; to deal effectively with climate change and attain energy independence; to create new engines of growth on various fronts, including the development of green technologies, the greening of industry, the transition to a more advanced and cleaner industrial structure, and laying the ground for a green economy; to incorporate the practices and principles of corporate social responsibility into business operations ; and to raise the overall quality of life for the people and to enhance the contribution to the international community through strong advocacy for green growth.

The following key messages have been distilled from the assessment and serve to indicate a way forward. Although the subregion has progressed in integrating the pillars of sustainable development, a number of weaknesses and challenges still remain and must be addressed. The key challenges relate to the lack of financial resources to foster sustainable development, given weak private sector and limited public resources, in a context where donor commitments have not been forthcoming. Yet the transition to a green economy requires new technologies and additional human and financial resources.

- The subregion, though endowed with a rich natural resource base, currently benefits from a very small amount of global environmental financing for lack of technical capacity to develop bankable projects. Special windows for international financing need to be dedicated to the subregion to address mounting financing needs.
- The international community will have to step up access to technology and technology transfer that is affordable and suited to the African context, in line with the Bali Strategic Plan for Technology Support and Capacity-Building (e.g. solar, small and mini hydros etc).
- The green economy is a welcome development that the region is willing and ready to embrace. However, is development should not be used as a justification for new barriers to trade, aid or access to finance.
- Land use planning, urban planning and infrastructure development require concrete actions and best practices. These practices must be stepped up to enable the subregion to embrace and benefit from the transition to a green economy.
- Institutional mechanisms to monitor and ensure balanced integration of the three pillars of sustainable development need to be established or and where they exist, strengthened and positioned where they will have the muscle to influence policy and decision making.
- Countries need to recognize the contribution of the natural resource base to economic growth and social transformation and integrate natural resource accounting into national economic statistics and reporting. This will provide an informed basis for them to increase the share of their national budgets allocated to sustainable development.

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Annex

List of persons consulted

1.	**Ms Wivine Ntamubano**	EAC secretariat, Arusha
2.	**Dr Tom Okurut**	National Environment Management Authorities. Uganda
3.	**Ms Marie Rose Kabura**	Ministry of Water Environment, Physical Planning and Urban Planning, Burundi.
4.	**Mr Tesfaye Woldeyes**	Environmental Protection Authority, Ethiopia
5.	**Dr Rodgers Mukwaya**	ECA Subregional Office for Eastern Africa, Kigali, Rwanda
6.	**Mr Soteri Gatera**	ECA Subregional office for Eastern Africa, Kigali, Rwanda
7.	**Dr Rose Mukankomeje**	Rwanda Environment Management Authority, Rwanda
8.	**Ms Claire BALBO**	Secretariat of the United Natins International Strategy for Disaster Reduction, Nairobi, Kenya
9.	**Ms Sue Edwards**	Institute for Sustainable Development, Ethiopia
10.	**Dr Dessalegne Mesfin**	Environmental Protection Agency, Ethiopia
11.	**Mr Charles Akol**	ECA, Addis Ababa, Ethiopía
12.	**Mr Gizachew Abegaz**	Consultant in land management, Ethiopia
13.	**Dr Brian Otiende**	EAC secretariat, Arusha
14.	**Mr Nestor Nikobagomba**	Ministry of Environment, Burundi
15.	**Mr Samuel Otuba**	Commissioner-Planning, Kampala, Uganda