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REPORT ON ECONOMIC AND SOCIAL CONDITIONS OF THE EASTERN AFRICA SUBREGION 2009



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OVERVIEW

The world economy is facing a deep downturn

The publication of the 2009 Economic Report on the Social and Economic Conditions of the Eastern Africa subregion coincides with the convergence of the food-fuel-financial crises, - compounded by climate change- constitutes a real threat to human and economic development for the world in general, and Africa in particular.

The world's economy is mired in the worst financial crisis since the Great Depression. What first appeared as a sub-prime mortgage crack in the United States housing market during the summer of 2007 began widening during 2008 into deeper fissures across the global financial landscape and ended with the collapse of major banking institutions, precipitous falls in stock markets across the world and a credit freeze. These financial shockwaves have now triggered a full-fledged economic crisis, with most advanced countries already in recession and the outlook for emerging and other developing economies deteriorating rapidly, including those with a recent history of strong economic performance. Although developed economies are leading the global downturn, it appears that the weakness has rapidly spread to developing countries and the economies in transition, causing a synchronized global downturn in the outlook for 2009. While developed countries are experiencing some of the sharpest contractions, households in developing countries are much more vulnerable and likely to experience acute negative consequences in the short and long-term. Declining growth rates combined with high levels of initial poverty leave many households in developing countries highly exposed to the crisis.

African economies are also experiencing a serious slowdown

In Africa, the crisis is undermining the gains of the economic reforms undertaken over the past decades. Countries are experiencing mounting fiscal pressures as government revenues decline, making it difficult to keep expenditures at the levels required to achieve adequate growth rates and meet development goals. The decline in government revenues poses a severe threat of accumulation of external and domestic debt. It is therefore necessary for the continent to look for mechanisms of reducing its vulnerability and pursuing the continent's social and economic development. Countries will be required to cooperate in view to formulate effective and coordinated macroeconomic and sectoral policies meant at reducing economic vulnerability, promoting region's integration to regional and international markets, tackling food security challenges and mitigating the impacts of climate change.

The crisis has already had a severe impact on global commodity markets with far-reaching implications for the prospects of the developing world at large. Commodity prices have been highly volatile during 2008. Grain prices increased by 88% from March 2007 to March 2008, and this trend had begun in 2003. Trends in world market prices reversed sharply from mid-2008, however. Oil prices have plummeted by more than 60 percent from their peak levels of July to November. The prices of other commodities, including basic grains, also declined significantly. In the outlook, most of these prices are expected to even out further along with the moderation in global demand.

Global food prices that surged in recent months have caused large spikes in the price of rice, maize and wheat. These three basic staples account for 20 percent of the food consumed in Sub-Saharan Africa, providing about 30 percent of the calories. According to the World Bank report¹, 45 percent of rice and 85 percent of wheat consumed in Africa is imported. Surging

¹ The World Bank: "The Effects of High Food Prices in Africa", interview by Robert Townsend, Senior Economist, 2008

demand for food crops has increased faster than supply and led to requests for emergency food aid in some African countries. Also, as Africa imports almost all the fertilizers it uses, and because fertilizer prices have doubled over the last two years, there is growing concern about the negative impacts on food production, and many African countries had to rely on food imports and aid, increasing their vulnerability.

This global financial crisis will most likely substantially set back progress towards poverty reduction and the Millennium Development Goals. The tightening of access to credit and weaker growth will cut into public revenues and limit the ability of African country Governments to make the necessary investments to meet education, health and other human development goals. Unless adequate social safety nets are in place, the poor will no doubt be hit the hardest. An estimated 125 million people in developing countries were already driven into extreme poverty because of the surge in global food prices since 2006.

Box 1: Growth in Africa will suffer from the global crisis

Growth in Africa is expected to decelerate to 4.1 percent in 2009 from 5.1 percent in 2008, as the contagion effects of the global economic slowdown spread throughout the region, while inflationary pressures continue to dampen consumer demand. Africa would be impacted through weakened export demand, lower commodity prices and a decline in investment flows to the region. Consequently, employment growth in Africa is anticipated to weaken, pushing unemployment rates higher and forcing more workers into the already large informal economy. Inflation is expected to subside from 2008 levels. Risks for greater growth retardation exist if donor countries do not live up to their aid commitments, threatening not only the achievement of the MDGs, but also undermining past progress.

UNCTAD: World Economic Situation and Prospects 2009, New York 2009

Need for strong and complementary policy efforts to boost economic development

While world leaders are looking for immediate responses to the crisis, in particular, necessary macroeconomic policies to rescue the financial sector from widespread systemic failure, African countries specifically should look to long run policies, in particular how to broaden development policy framework needed to conduct active investment and technology policies so as to diversify their economies and reduce their dependence on a few commodity exports, thereby allowing them to meet key development challenges, including reaching greater food security, addressing climate change and meeting the Millennium Development Goals. This will certainly require massive resources for public and private investment in infrastructure, food production, education and health and renewable energy sources.

Accelerated progress towards meeting the MDGs by 2015 will require bold actions, including improving infrastructures, in particular the information and communication technologies, in view to reducing transaction costs in producing goods and services and promoting regional integration. Complementary policy efforts should aim at addressing key development challenges hampering economic activities.

In Africa, Information and Communication Technologies (ICTs) is considered as a key tool for progress and economic development. The poor state of infrastructure, is a major impediment to domestic market and regional integration, as well as to equitable access to social services and therefore to economic growth. One area to overcome this challenge is to scale up and boost the use of information and communication technologies (ICTs). ICTs are crucial for developing countries.

1. ECONOMIC PERFORMANCE OF THE EASTERN AFRICA SUB-REGION: TRENDS, CHALLENGES AND PROSPECTS

1.1. Economic Performance in Eastern Africa affected by the global crisis

1.1.1. Slowdown of economic growth

For Eastern African countries, almost all countries are highly exposed to the poverty effects of the crisis (with both declining growth rates and higher poverty levels), although over the past three years many countries in the subregion have recorded significant economic growth (above 5 percent per annum). For example, the 2008 Economic Report for the Eastern Africa subregion highlighted the good performance recorded by the subregion, with an average economic growth rate of 6.8 percent in 2007, spurred by macroeconomic reforms and management, high investments in infrastructure, increased FDI in some countries and the restoration of peace and security in post-conflict countries. The report also stated that despite good performance in terms of GDP growth, the growth has not yet translated into significant poverty reduction and that the subregion was unlikely to achieve the MDGs. The report stated that accelerated progress towards meeting the MDGs by 2015 require bold actions, including fostering strong macroeconomic policies and regional integration. The global financial crisis is undermining these efforts to meet the agreed development goals.

In 2008, Africa has recorded a low growth performance, from 5.8 in 2007² to 5.1 in 2008, far below the required 7 per cent to achieve Millennium Development Goals. Growth in Africa is expected to slow further in 2009 to 4.1 per cent³, as the contagion effects of the global economic slowdown spread throughout the region, leading to weakened export demand and financing, lower commodity prices and a decline in investment flows to the region.

Table 1: Regional growth performances, 2005-2008 (%)

	2005	2006	2007	2008
Eastern Africa	6.1	6.2	6.3	5.7
Southern Africa	5.6	6.1	6.2	4.2
North Africa	5.2	5.8	5.9	5.4
West Africa	5.4	4.6	5.2	5.4
Central Africa	3.6	1.8	3.9	4.9
Africa	5.3	5.6	5.8	5.1

Source: UN-DESA, (2008a).

In 2008, economic growth slowed down from 6.3 per cent to 5.7 per cent (Table below). Despite improved macroeconomic policy implementation and good performance in some sectors such as finance, telecommunications and construction and the expansion in agriculture, countries in the subregion are in a weaker position than most other regions in Africa because of their poverty levels and reliance on commodity exports. The global crisis, with its dire consequences on price spikes of fuel and food prices, and financial disruptions, have exacerbated this vulnerability, reducing growth rates and increasing poverty levels.

² The computations are based to data available end of October. The estimations have been made before end of 2007 for Africa annual growth rate in 2008 were 5.9 per cent.

³ United Nations: World Economic Situation and Prospects 2009

The economic performance varies across African regions and countries. The Southern Africa region recorded the poorest performance (4.2 in 2008 from 6.2 in 2007), while the Central Africa region made a significant increase of its GDP.

Despite the global slowdown, East Africa maintained the highest growth on the continent over 2006-2008. Again, Rwanda led the subregion with an 11.2 per cent real GDP growth rate in 2008, followed by Ethiopia (8.0 per cent), DRC (7.2 per cent), Tanzania (6.8 per cent), Seychelles (6.2 per cent), Uganda (6.0 per cent), Madagascar (5.2 per cent), and Burundi and Djibouti (5.0 per cent each). Growth plummeted in Kenya from 6.1 per cent to 2.5 per cent, due largely to post-elections violence and a sharp fall in tourism. Growth remained weak in Eritrea (1.0 per cent) owing to poor rainfall, weak agricultural production and a poor business environment. Political instability disrupted tourism and FDI inflows as well as overall growth in Comoros (0.5 per cent).

Growth factors in East Africa included expansion in agriculture, horticulture, and services, especially finance, telecommunications and construction. The subregion also benefited from healthy inflows of aid and strong growth in tourism and FDI. However, growth in some East African countries such as Uganda remains constrained by infrastructure bottlenecks, especially energy and transportation.

Estimates for 2009 still predict a further low performance. Growth in Eastern Africa is expected to remain strained during 2009, as the global economy is projected to experience a gradual recovery from 2010. However, the outlook is highly uncertain, and the timing and pace of the recovery will depend critically on strong policy actions.

Table 2: Eastern African Countries real GDP growth, 2001-2009 (change in annual %)

	2001	2002	2003	2004	2005	2006	2007	2008	2009 (Est.)
Burundi	3.2	5.6	-2.3	4.4	0.9	6.3	6.3	5.0	6.0
DR C	-4.1	3.4	6.0	6.9	6.5	7.0	7.0	7.2	9.0
Djibouti	1.5	2.0	2.5	2.1	4.6	4.2	5.0	5.0	6.0
Eritrea	5.8	-1.2	5.4	1.0	4.6	4.8	2.0	1.0	2.5
Ethiopia	7.0	7.5	3.1	12.3	8.7	5.3	9.4	8.0	7.5
Kenya	1.2	1.4	2.8	4.3	4.7	5.4	6.3	2.5	2.5
Madagascar	6.0	-12.7	9.8	5.3	4.6	5.7	5.6	5.2	7.2
Comoros	2.4	2.3	2.1	1.9	2.0	3.0	1.2	0.5	1.5
Rwanda	6.0	9.4	3.2	3.7	6.0	6.3	6.3	11.2	6.3
Seychelles	-8.1	1.2	-6.3	-2	-2.3	8.3	7.3	6.2	4.2
Tanzania	4.6	4.8	5.6	4.0	5.0	4.0	6.9	6.8	6.9
Uganda	6.4	6.9	4.4	5.6	5.6	6.2	6.0	6.0	6.6
Eastern Africa	4.4	3.0	4.9	5.2	6.1	6.2	6.3	5.7	5.5

Source: IMF, 2008 & EIU, 2008

1.1.2. Inflation rates still high in many countries

Starting in 2007, the inflation increased all over the world following raise of commodity prices. This trend accelerated in 2008, fueled mainly by average price spikes. Africa did not escape from the world economic trend and registered high inflation scores. Factors contributing to this 2008 inflation pressure in Africa include the sustained high level of government spending and increased domestic demand following the high oil revenues, especially in oil-exporting countries. Eastern Africa experienced also high inflation rates. With the exception of Djibouti, Madagascar, Comoros and Tanzania, all other countries in the subregion recorded a two-digit inflation rates. Ethiopia registered the highest inflation rate (46 per cent)⁴.

If the 2009 estimations are encouraging with decreasing trend, only rare countries will go under the 2007 inflation rates. However, increasing inflation rates in Africa have complicated macroeconomic management and poverty reduction strategy.

Table 3: Inflation Rate, 2002-2009 (annual change in %)

	2002	2003	2004	2005	2006	2007	2008	2009
Burundi	3.5	10.7	8.4	13.4	2.5	3.3	19	10
DR Congo	25.3	13.0	9.2	21.4	10.0	8.9	17	16
Djibouti	0.6	2.0	2.0	3.1	3.0	3.0	8.5	-
Eritrea	16.9	22.7	25.1	12.4	16.5	22.0	18	15.5
Ethiopia	-7.2	15.1	9.6	6.8	12.3	12.2	46	15
Kenya	2.7	3.5	3.5	4.0	13.0	1.6	25.5	7.6
Madagascar	15.8	0.2	13.8	18.4	11.2	9.6	9.2	8.9
Comoros	3.3	3.7	4.5	3.6	3.8	3.0	4.5	4.0
Rwanda	2.0	7.4	6.9	9.2	5.5	5.0	16	9
Tanzania	4.6	4.5	5.9	4.4	7.5	6.5	9.5	7.7
Uganda	5.7	5.1	3.5	8.0	6.7	7.0	11.6	7.2

Source: IMF, 2008 and EIU, 2008.

1.1.3. Prospects for 2009: Further slowdown

The economic growth performance for African countries is expected to shrink again in 2009. Growth in Eastern Africa region is expected to fall from 5.7 to 5.1 per cent. However, serious uncertainties stemming from the still on going global financial crisis and its effects in the short and medium term are surrounding these forecasts.

On a positive note, the world economy is expected to recover very slowly during 2010. Despite weak integration in global system, Africa will benefit from this global rebound. Eastern Africa is expected to take again the lead on the continental level since the factors accounting for poor performances will be thinned down at some extent. Countries are sensitive to economic reforms and political stability. Regional Integration schemes are working hard on these agenda. Therefore, FDI will be increased, investment climate improved and inflation eased.

⁴ On the continental level, Ethiopia is ranked second poor performance after Zimbabwe hyperinflation. It is followed far behind by Guinea (30 per cent), Sao Tome (28) and Kenya (25). The explanation for Zimbabwe and Kenya is the political instability.

1.2. Regional Integration and the key role of Regional Economic Communities (RECs)

1.2.1. Multiple membership to Regional Economic Communities

The 13 countries of the East African Subregion share membership in six RECs and three other intergovernmental organizations including COMESA, IGAD, EAC, CEN-SAD SADC, ECCAS, CEPGL, ICGLR and IOC. Except Somalia, all the 13 countries in Eastern Africa subregion are members at least of three of the 9 intergovernmental organizations. COMESA, IGAD and ICGLR are the three organizations with the greatest membership. Multiple memberships of East African countries in different RECs with considerable overlapping - and in some cases incoherent - mandates and goals has been hindering integration efforts in the subregion. Many countries are cumulatively members of several RECS implementing similar programmes like COMESA and IGAD, while COMESA has its Free Trade Area operating under different rules of origin from the preferential trade arrangement for SADC space.

Table 4: Membership of Eastern African countries to RECs

COUNTRIES/RECs § IGOs	COMESA	IGAD	EAC	CEN-SAD	CEPGL	ICGLR	IOC	SADC	ECCAS
Burundi	X		X		X	X			X
Comoros	X						X		
DR Congo	X				X	X		X	X
Djibouti	X	X		X					
Ethiopia	X	X				X			
Eritrea	X	X		X					
Kenya	X	X	X	X		X			
Madagascar	X						X	X	
Rwanda	X		X		X	X		X	
Seychelles	X						X		
Somalia		X		X					
Tanzania			X			X		X	
Uganda	X	X	x			X			

In October 2008, the Tripartite Summit of the Heads of State and Government of the Common Market for East and Southern Africa (COMESA), East African Community (EAC) and the Southern Africa Development Community (SADC) agreed on a programme of harmonisation of trading arrangements amongst the three RECs, free movement of business persons, joint implementation of inter-regional infrastructure programmes as well as institutional arrangements on the basis of which, the three RECs would foster regional integration. The Summit further resolved that the three RECs should immediately start working towards a merger into a single REC with the objective of fast tracking the attainment of the African Economic Community by the establishment of a Free Trade Area (FTA) encompassing the member/partner States of the 3 RECs with the ultimate goal of establishing a single Customs Union.

1.2.2. Trade Liberalization and Competitiveness

Progress on integration in Eastern Africa is mixed across sectors, regional economic communities, and member states. There have been some strides in trade, communications, macroeconomic policy, and transport. Some RECs have made significant progress in trade

liberalization and facilitation (COMESA), in free movements of people (the SADC)), in infrastructure (the SADC and EAC), and in peace and security (the SADC). Overall, however, there are substantial gaps between the goals and achievements of most regional economic communities, particularly in greater internal trade, macroeconomic convergence, production, and physical connectivity.

For example, COMESA has developed trade facilitation programmes and activities towards the establishment of a Customs Union by 2008 and a Common Market by 2014. In that context, COMESA Free Trade Area (FTA) along with trade facilitation measures has brought significant but uneven economic gains for COMESA member States. Intra-COMESA trade has doubled from 2002 to 2007 from 4.5 billion dollars to 9.1 billion dollars, representing around 5 percent of the total international trade of member countries. This level of intra-regional trade can still be increased up to a minimum of 25 percent or more.

Various reports have highlighted the weak performance of exports in Eastern African countries. As shown in the table below, from 2005 to 2007 Eastern Africa has witnessed an increase of 26.7 percent in exports, while during the same period, imports have increased of 44.7 percent, worsening the current account deficit. Imports value has increased due to the increase of fuel and food prices, whereas the increase of exports resulted from the rise of prices of primary products, mainly coffee and tea at international markets.

The contribution of trade to GDP in Eastern Africa is quite significant (51 percent), though still lower than other Africa's subregions (Central: 76 percent, Southern: 75.5 percent, and Western: 71.6 per cent).

Table 5: Eastern Africa: International Trade (Millions of USD)

	Exports			Imports			Total 2007
	2005	2006	2007	2005	2006	2007	
Burundi	57	59	44	205	240	297	341
Comoros	14	11	18	95	103	1109	127
Congo DR.	2071	2319	2537	2473	2740	2601	5138
Djibouti	39	50	146	277	346	512	658
Eritrea	11	12	13	495	400	457	470
Ethiopia	847	1004	1067	3623	4383	4782	5849
Kenya	3455	4502	4790	5601	6784	9278	14068
Madagascar	836	974	1051	1426	1520	1906	2957
Rwanda	126	142	164	374	438	549	713
Seychelles	351	423	512	650	710	889	1401
Somalia	127	140	-	165	220	-	-
Tanzania	1676	1736	1885	2998	3864	4338	6223
Uganda	787	889	954	1608	1981	2200	3154
Eastern Africa	10397	12261	13181	19990	25897	28918	41099
Africa	298000	286950	416620	249000	239455	298290	714910
Share of EA (%)	3.5	4.3	3.2	8.0	10.8	9.7	5.7

Source : Division des Statistiques de la BAD, 2008.

This situation reflects the difficulties of Eastern African countries of diversifying their exports, in particular, increasing their exports of manufactured goods. Most of countries in the subregion still rely on two to three primary products, for which prices are determined on international markets, without any control on their trend. The importance of manufactured goods on economic development, in particular for developing countries, is well known. Economies that have a high proportion of manufactured goods to GDP are less exposed to external shocks, price volatility and climatic variations.

Structural and institutional constraints that hamper the expansion of manufacturing sector include among others: low quality of infrastructures, high costs to start business, lack of skilled labor, non-protection of investors, difficulties to access credits, and heavy administrative and institutional systems in countries.

Integration of the Eastern Africa subregion into the world economy will require industrial consolidation in terms of production of industrial products to world markets, in view to take full advantage of opportunities offered by globalization, information technologies, knowledge economies and investment. In order to stimulate growth of the manufacturing sector, the major obstacle remains underdeveloped infrastructures, which result into high transaction and production costs for producers and hamper competitiveness for local markets and export production.

In that framework, countries in the subregion will need to diversify their economies, in particular by:

- Reducing excessive dependence vis-a-vis limited primary products, extending risks to a more large range of products;
- In extending to a large range of products by processing primary products, it will constitute the starting point for an industrialization era.

1.2.3. Food Security and Sustainable Development

Eastern Africa is the worst hit region in the world by food insecurity; over 70% of the population is rural and depends directly on the land and the natural environment for its livelihoods and well-being. Countries are confronted with a multitude of challenges including the global fragility of multilateral trade, volatility of growth, and liquidity and credit shortages, along with vulnerability to natural disasters and high frequency of droughts and floods. In general, challenges compromising self-reliance in food and agriculture include the following factors⁵:

- Low internal effective demand due to poverty;
- Poor and un-remunerative external markets (with declining and unstable world commodity prices and severe competition from the subsidized farm products of industrial countries);
- Vagaries of climate and consequent risk that deters investment;
- Limited access to technology and low human capacity to adopt new skills;
- Low levels of past investments in rural infrastructure (such as roads, markets, storage, rural electrification, etc.) essential for reducing transaction costs in farming and thereby increasing its competitiveness in serving production, processing and trade; and
- Institutional weaknesses for service provision to the entire agricultural chain from farm to market.

Slow-growing supply, low stocks, and supply shocks at a time of surging demand for feed, food, and fuel have led to high price volatility. Biofuel production has also contributed to the changing world food equation and currently adversely affects the poor through price-level and price-volatility effects. Growth in food production is key to hunger reduction in Eastern Africa. Many governments are reported to allocate as little as less than 1 percent of their budgets to agriculture. Productivity driven increases in food production have been shown to have a strong positive impact on the rural economy, leading to increased food availability and a reduction of food prices in local markets. At the same time, the enhanced incomes of smallholders – the

⁵ J. Shaw, *World Food Security: A history since 1945* (2007, Palgrave Macmillan)

main producers of staples – provide a stimulus to rural economic activity by generating increased demand for the products of other sectors that are either linked to agriculture or supply consumption goods to farmers. However, many small farmers who would like to take advantage of the new income-generating opportunities presented by high-value products (meat, milk, vegetables, fruits, flowers) are facing high barriers to market entry (FAO 2007).

Eastern Africa, like the rest of Africa is suffering from the effects of climate change although Africa's contribution to greenhouse gas emissions is small (3.8 percent). Climate change will significantly increase food production risk and rural vulnerability, soil and water resource scarcity, exposure to climatic extremes including droughts and flooding, poverty and hunger. Smallholder and subsistence farmers, pastoralists and fisherfolk in developing countries may not be able to cope with climate change effectively, due to reduced adaptive capacity and higher climate vulnerability. Under such conditions, pressure to cultivate marginal land or to adopt unsustainable cultivation practices as yields drop is likely, and may increase land degradation, water scarcity and endanger biodiversity. This vicious dynamic may lead to large-scale migrations, as rural poor populations abandon regions that no longer can support livelihoods, food and fuel.

Useful synergies for adaptation and mitigation in agriculture, relevant to food security exist and should form the core of climate policy planning and implementation at national and international levels. These include avoided deforestation, forest conservation and management, agroforestry for food of energy, land restoration, recovery of biogas and waste and, in general, a wide set of strategies that lead to conserve soil and water resources by improving their quality, availability and efficiency of use. These strategies are often deeply rooted in local cultures and knowledge, as well as the focus of research, support and application by key international agencies and non-governmental organizations (NGOs). They all tend to increase resilience of production systems in the face of increased climatic pressures, while providing significant carbon sequestration or reducing land-based greenhouse gas emissions. Many of these synergies are also relevant to social, economic and environmental sustainability (FAO 2008).

Climate change and food security in Eastern Africa are not only a conservation problem but are socio-economic issues closely interlinked that must be dealt with at a global scale. Measures aimed at increasing food production in a sustainable way, adapting to climate change will have to be devised within a same holistic institutional and political framework leading to poverty reduction and sustainable economic growth as well as improved living conditions and greater happiness. The creation and consolidation of innovative and constructive partnerships between different types of partners from the North and the South including governments, research institutions, NGOs, UN Agencies, the private sector, farmers, and pastoralists will be crucial to achieve tangible results in the ground.

1.2.4. Major challenges to regional integration

Trade and market integration: In all RECs, market and trade integration is being advanced through a series of measures such as: removal of tariff barriers to intra-REC trade; removal of non-tariff barriers; and development and enactment of common trade policies. The effective implementation of these and other measures will lead in the long run to the achievement of zero tariffs for intra-REC trade and, conditional on convergence of RECs, a common external tariff for the continent.

Non-tariff barriers: The persisting existence of non-tariff barriers (NTBs) is a growing concern in the subregion. Customs officials, police roadblocks and constant harassment by immigration officials hamper free trade. But these are not simply cases of extortion; they also reflect the slow implementation of regional integration agreements to remove tariff and non-tariff barriers

to trade. If left unattended, these will negatively affect the benefits of greater market openness. NTBs have an extensive scope as they impede intraregional trade and serve the cause of protectionism.

Free movement of people: Progress in the area of free movement of people remains modest, largely because unemployment remains very high in Africa and there are fears that such liberalization will bring about asymmetric benefits. However, some RECs are progressing in this area in spite of the constraints. In SADC, half of the member States have signed the Protocol on the Facilitation of Movement of Persons adopted to ease movement of people within the region through a universal visa arrangement; the harmonization of immigration laws, regulations and procedures; and the introduction of regionally uniform machine-readable passports and visas. The EAC has introduced a common passport valid within the community to facilitate cross-border movement of the nationals of its members. Free movement in other regional economic communities is more restricted, pursued more country-to-country than multilaterally.

Physical integration is critical for economic integration: Trade infrastructure in much of Africa is in a very poor state and needs to be rehabilitated and upgraded, in order to improve trade on a cost-effective platform and maximize regional competitiveness. Three areas are critical: transport; information and telecommunications technology; energy and water.

Energy: Regional energy cooperation and integration has achieved some notable outcomes, particularly in the following areas:

- Joint development and/or utilization of hydropower generating facilities;
- Establishment of regional power pools and interconnection of electricity grids;
- Energy pooling through the development of cross-border gas pipeline projects;
- Development of cross-border energy infrastructure through expansion of oil pipelines; and
- Promotion of cooperation on cross-cutting issues such as capacity building, energy information systems management and sharing of experiences and best practices.

Promoting regional cooperation and integration in the area of cross-border energy trade would help minimize the cost of energy supply arising from the economies of scale of large regional supply systems, while enhancing reliability and security of supply. In the process of regional sector integration, the RECs can provide the appropriate framework for cooperative approaches for the growth of energy infrastructure and the creation of larger markets, thereby promoting inter-country energy exchange.

Water: A number of river basin organizations (RBOs) have been established and old ones reinvigorated. In 2005, countries in the Nile Basin area set up the Nile Basin Authority. The river basin authorities are increasingly seen as instruments for advancing the regional integration agenda and for poverty reduction. More attention is being focused on joint socio-economic projects for the affected communities in each basin, including water for food security (irrigation), navigation, hydropower, electricity generation and tourism.

A number of development partners are assisting the RECs in developing these projects. Given the prevalence of droughts and floods in the subregion, mitigating measures such as Hydrological Cycle Observing Systems (HYCOS) are being developed to address disasters as and when they arise.

ICTs: There has been measurable success in inter-country connectivity, mostly induced by the global revolution in telecom technology and the growing commercialization and privatization of national services. Some regional economic communities show more connectivity (SADC and COMESA), while others are lagging behind (CEMAC, ECCAS, CEPGL). And it is still a major pain and costly to make a call across national borders in Eastern Africa subregion.

Macroeconomic Convergence: Some regional economic communities have established macroeconomic convergence criteria to help their members focus on economic stability as a sine qua non of integration and development. But due to differences in economic and political governance and to civil conflicts, it has been difficult to achieve convergence. And even where some progress had been made, policy reversals have occurred.

Knowledge Sharing: There is visible cooperation in early warning systems, agricultural research, and capacity building. The SADC region is served by the Southern African Centre for Cooperation in Agricultural Research and Training in Southern Africa. And international institutions—such as the International Institute for Tropical Agriculture and the International Water Management Institute—are contributing to African integration through exchanges of information on best practices among regional economic communities.

Public goods: On the production and use of public goods through collective efforts and resource pooling, not much can be written, except in maintaining peace and security, where SADC has recorded major achievements. Programs for combating crime, HIV/AIDS, and technological backwardness, and harnessing physical resources remain largely national in outlook. Progress in the various aspects of integration has been hampered by the lack of resources, both financial and human, the low implementation of treaty obligations, the inability to prevent and resolve conflicts decisively, and the different national currencies, almost none of them convertible, with the CFA franc zone the only real exception.

Food insecurity: The performance of the agriculture sector in Africa has slightly improved, but this did not translate into improved food security and reduced poverty. Sub-Saharan Africa accounts for 13 percent of the population and 25 percent of undernourished people in the developing world. It is the developing region with the highest proportion of people suffering from chronic hunger. Efforts to reduce hunger in the region have been hampered by natural and human-induced disasters, including conflicts occurring during the 1990s and the spread of HIV/AIDS.

Although the livestock sector is relatively easier than the crop sector to modernize, it still largely depends on traditional herds and plagued by diseases. The fishing industry is still generally artisanal though some coastal countries and islands have well-developed marine fishing activities but exploitation is mainly in the hands of licensed foreign companies. In addition, aquaculture is hardly developed. Currently fishing practices tend to have negative impacts on lakes and sea ecosystems in spite of the existence of fishery regulations in most countries. Fishing is also a source of conflict between communities across fishing grounds.

1.2.5. Role of RECs in fostering regional integration

Regional economic communities are expected to act as the nerve centres of the regional integration process. Indeed, they are entrusted with unique responsibility for:

- Conceiving and monitoring the implementation of related policies and programmes;
- Mobilizing necessary resources to support such policies and programmes; and
- Reporting periodically on progress.

The key issue is whether subregional groupings serve as building blocks or stumbling blocks to continent-wide integration.

The Constitutive Act of the African Union makes it clear that the primary goal of the Union is to establish the African Economic Community and assigns to RECs the primary responsibility for making that happen. An intermediate step in this effort is the transition of RECs into customs unions. Significant progress has been made on this issue. The East African Community (EAC) became a customs union on January 1, 2005 with the introduction of the EAC Customs Union Protocol. SADC hopes to establish a customs union by 2010, which will be a significant achievement for SADC integration

Effective institutional mechanisms and capacities are central ingredients of a successful integration process. The regional economic communities and their member states have a major role to play in developing and sustaining such effectiveness through appropriate policies and the provision of necessary political, material, and human resources support.

1.2.6. The Way Forward

As building blocks for the African Union, the regional economic communities must be streamlined and strengthened to ensure that they:

- Avoid engaging in activities in which others—for example, nation states or regional organizations—have comparative advantage.
- Operate as efficiently as possible, with the power to exercise sanctions on countries that fail to fulfill their obligations.
- Set priorities for their activities, striking a balance between social dimensions and economic priorities.
- Develop a coherent approach to working with other stakeholders—including civil society, political parties, women, and youth—in the interest of the common good.
- Meet their obligations under the WTO and position themselves effectively for negotiations with the European Union.

Regional economic communities, as the main operators of regional integration, have not received the supranational authority required to ensure implementation of collective decisions and enforce policy convergence. They need to be rationalized and empowered to act on behalf of their member countries. Deeper, more coordinated, more effective regional integration means giving these institutions the authority to oversee the implementation, monitoring, and coordination of regional integration activities. By working together under the ambit of the African Union, they could be more successful in their integration efforts.

Revitalized regional integration offers one of the most credible strategies for tackling Africa's development challenges, because of the many weaknesses in resources and other aspects of economic capacity that individual countries face. Collective efforts, with dynamic political commitment to integration, can help overcome the daunting challenges. But the benefits of regional integration are neither automatic nor necessarily large. The following caveats must therefore be noted.

- Regional integration is just one instrument for advancing African countries. To be effective, integration must be part of an overall development strategy. So regional integration arrangements should address problems for which they are better suited.
- Regional integration arrangements can create winners and losers, making it essential that members assess the prospective benefits and costs of regional integration to boost gains and minimize losses. Strategies should include a transparent, equitable, rules-based system for sharing gains and resolving disputes.
- Realizing the benefits of regional integration requires strong, sustained commitment from member countries. Leaders should view these arrangements as more than good "sound bites" in economics and politics. They should dedicate the effort required to

make them work. It is also important that members implement domestic policies and build domestic institutions aimed at promoting growth, macroeconomic stability, and poverty reduction.

2. HARNESSING ICTs TOWARDS REGIONAL INTEGRATION AND ECONOMIC GROWTH

2.1. The Growing importance of ICT as a valuable tool for economic development and regional integration

2.1.1. Harnessing knowledge for development

It is now well established that technological progress and innovation are the long-term drivers of economic growth. In the context of a global knowledge economy fuelled by the fast pace of technological innovation, it is important for developing countries to lay down foundations for building their capacity to acquire and create knowledge and technology in order to take advantage of the opportunities offered by globalization and, at the same time, to address emerging global challenges. The challenge is therefore to harness knowledge for development – by providing an enabling environment for the production of ideas and innovations, as well as for their dissemination and use by different actors, directly or indirectly involved in the production process.

Since the early 1990s, the Eastern Africa subregion's telecommunications landscape has been considerably transformed, with many countries opening up this sector, more lines have been added, and spurring the development of value added services. Even though the current reforms in the telecommunications sector do not emphasize accelerated infrastructure development there are clear signs of greater availability of services within the countries of the subregion. Mobile telephony and Internet are spreading beyond the capital cities –a good indication of the potential scale and scope of the development of telecommunications infrastructure development. The rapid advances in technology and the declining cost of acquiring new ICT tools have opened new windows of opportunity for the countries in the subregion to accelerate economic growth and development.

2.1.2. Accelerating regional integration into the global economy

The use of ICT could foster intra-regional trade and accelerate the subregion's integration into the global economy. ICT will thus improve the management of institutional information, intra-institutional communication between regional cooperation institutions; promote trade, financial cooperation and efficiency in key sectors such as agriculture and education. Likewise regional cooperation could foster economy of scale that increases Africa's collective bargaining position, improve compatible standards and attract investment. The niche for ICTs as per regional integration also lies in using these technologies to strengthen the operations of the sub-regional institutions and facilitate their operations and activities and service delivery in accordance with their mandate.

In addition, the ICT tool has been placed at a high priority with the advent of the New Partnership for African Development (NEPAD), where telecommunications infrastructure development is one of the key goals under the ICT framework. Consequently, a sound policy environment would be critical in attracting investments into the sector and advancing NEPAD objectives.

2.2. ICT environment and progress

Information and Communication Technologies (ICTs) are essential to increasing productivity in a country and improving the populations' well-being. In this regard, the sector of ICT plays a strategic role for subregion's economies. Most countries in the subregion have initiated significant reforms of the ICT sector, including: formulation and implementation of NICI plans, privatization of telecommunication companies, liberalization of the sector, etc. Countries are at various levels of development of ICT policies.

2.2.1. Landline Telephone System Infrastructures

In 2008, the existing landline systems in the subregion only provide limited national coverage with tele-density which is largely less than 2 percent. Nevertheless, Tanzania (8 mobile operators) and Kenya make exceptions as their respective liberalization programmes have allowed their populations to be connected to telephone networks, which resulted into a market expansion, leading to the development of activities and the restructuring of the private sector. For instance, in Rwanda, with the growth in ICT, almost the whole country is connected and for 2009, the Government plans to invest 100 millions dollars, or 3 percent of GDP, for the development of the ICT sector. Ethiopia is about to bring ICT to rural areas. Madagascar continues to lag behind (1 percent on average), except for mobile telephony for which the Great Island registers an exceptional growth of 18 percent.

Unfortunately, most of these systems are characterized by outdated infrastructure and the sector faces rapid technological evolution whereby equipment is rendered obsolete before it can pay for itself which slows down replacement because of the consequent shortage of resources.

Management of landline telephone system services is still in the hands of the public sector and in most cases entrusted to autonomous structures. The rapid evolution of technologies and capacity constraints are essentially responsible for the inefficiency in the maintenance of landline network infrastructure. In addition, there exists an acute limitation of technical capacity of staff in charge of infrastructure management which combined with absence of required training facilities inhibits the ability of technical staff to keep abreast of and adapt to fast-developing technologies.

Recommendations have been put forward for specific initiatives for modernizing of landline telephone systems to support regional cooperation as well as training and constant updating of technical staff's knowledge to the required standard. Since various experiences have shown that commercialization of infrastructure and maintenance management has led to better maintenance, privatization of these services is a priority. There is also need for a coordinated approach through appropriate regional cooperation mechanisms in the execution of such projects.

Table 6 : Status of ICT in Eastern Africa, 2008

Country	Internet Per 100 Users	PC Per 100 Users	Cellular Subscribers Per 100 Users	Main Telephone Lines Per 100 Users	Broadband Per 100 Users
Burundi	0.77	0.73	2.03	0.41	0.00
Comoros	2.56	0.68	2.01	2.12	-
Djibouti	1.36	2.75	6.37	1.56	0.01
DR Congo	0.30	0.02	7.44	0.02	-
Eritrea	2.19	0.57	1.36	0.82	0.00
Ethiopia	0.21	0.39	1.09	0.91	0.00
Kenya	7.89	1.44	18.47	0.84	0.00

Madagascar	0.58	0.55	5.47	0.68	0.00
Rwanda	0.70	0.21	3.40	0.18	0.02
Seychelles	354.67	19.84	86.52	25.44	1.63
Somalia	1.11	0.91	6.08	1.22	0.00
Tanzania	N/A	N/A			
Uganda	2.51	1.67	6.73	0.36	0.00

Data Infrastructures 2008 : Report UN E-Government Survey 2008

2.2.2 Mobile Telephone Systems and Data Transmission Infrastructures

All countries involved in the Eastern Africa subregion have allowed the private sector to set up and exploit mobile phone and data transmission (Internet) network infrastructure. However, in some countries the public sector still provides these services along with its practical monopoly on landline telephone services. Operator diversity favours the use of increasing modern and high-performance equipment. Nevertheless, this diversity is not sufficient to promote satisfactory network development. Indeed, the concern is the high concentration of such networks in urban areas. Member States have been urged to ensure that contracts for extension of mobile telephone and data transmission infrastructure networks provide for clauses imposing the coverage of rural areas. Furthermore, the interconnection of landline and mobile telephone networks signifies the need to improve technical performance of landline networks, which outdated infrastructure and equipment increase interconnection costs. Therefore, interconnection agreements should include provision for contracting parties to ensure technological adaptation of their respective networks.

2.3. ICT Development Policies, Strategies and Programmes

While some countries in the subregion have already or are in the process of putting in place ICT development policies, strategies and programmes, others are somehow lagging behind and need to make up for lost time in order to avoid imbalanced development in this sector. ICTs can only serve as effective tools of broad-based development, poverty reduction and opportunity for all, if people in every corner of developing countries and at all levels of society have reliable and affordable access to them. Broadening the reach and affordability of these technologies and services is a complex and difficult challenge for many developing countries, requiring substantial investments that are often unaffordable for the public sector and unattractive to the private sector. Priority areas could include e-government, health and education and information access to rural communities. In that context, coordinated initiatives motivated by regional cooperation and exchange of experience through a network of national experts should be promoted.

It is noted, however, that much of the ICT content is still mostly foreign and that cross-cutting issues of gender, youth, and people with disabilities (PWD) have not been adequately addressed. Moreover, there is lack of public/private partnership in the ICT sector.

2.3.1. Implementation of NICI plans at the subregional level

Recognizing the important role information and communication technologies (ICTs) can play in facilitating the attainment of development goals and encouraging the diffusion and utilization of information technologies in Africa and enhancing the entry of the continent into the global information society, the Economic Commission for Africa (ECA) launched the African Information Society Initiative (AISII) in May 1996, which serves as a guiding framework for building the information and communication infrastructure in Africa. This was the first framework of its kind

to concretely prioritize the issue of ICTs within the socio-economic development agenda. This initiative was a common vision to bridge the digital divide between Africa and the rest of the world and more importantly, to create effective digital opportunities. The AISI also represents a regional framework to support the implementation of the new Partnership for Africa's Development (NEPAD) Plan of Action.

Since the launch of AISI, AISI has been implemented mainly through the development of e-strategies/policies to deploy, harness and exploit ICTs for socio-economic development at the local, national and sub-regional levels, including national spatial data. ECA has been supporting member States to embark on the development of National Information and Communication Infrastructure (NICI) Policies and Plans which are instrumental to materialize the visions enshrined in the AISI at the national level and to create conducive environment for liberalisation and deregulation of the Telecommunication sector.

Since the elaboration of national ICT strategies helps countries address sectoral development challenges, it is imperative that member States demonstrate readiness to commit their scarce resources and foster ownership of the process. Thus far in Eastern Africa Region, more than ten countries have their policy documents, some are moving to the implementation. Like the Republic of Rwanda the implementation of the first phase of the NICI is ended and the country is now moving to the second phase.

2.3.2. National e-Strategies

ECA is working with countries on the Sub Region to formulate and implement ICT policies to achieve development goals in collaboration with various partners. The success is evident in that about all Eastern African countries are engaged in developing national ICT policies and strategies. Out of these, about ten countries have already completed the process of developing their ICT plans and strategies and are now in the process of mobilizing funds for the implementation of various ICT programs and projects. Republic Democratic of Congo is a only country in East Africa currently developed the ICT Policies.

Every policy is guided by a vision that gives it direction and focus. For this analysis, there is need to see how the various visions relate ICT to national development in general and to education in particular. Some interesting visions include:

- **Madagascar's** vision states that the country will be a leader in its region in providing high quality ICT services that will accelerate economic, social and cultural development
- **Ethiopia:** use ICTs to increase efficiency and effectiveness of the civil service, optimize the flow of information, to facilitate connectivity to the global information infrastructure and lay a firm foundation for e-business by the year 2010
- **Kenya:** A prosperous ICT-driven Kenyan society.
- **Tanzania, Rwanda, Uganda, DRC, Comoros, Burundi :** the visions focus on economic and social development. Convert the country into an information society by 2020.

The NICI plans involved elaborate and prolonged processes that often covered analysis of national priorities, holding sensitization workshops, development of ICT frameworks, securing agreement on the framework, writing policy documents, taking them through legislation, establishing action plans and implementation of programmes through public and private partnership.

The situation of ICT Policies Formulation and implementation in some countries in Eastern Africa Countries is described below.

Burundi: In collaboration with the United Nations Development Programme (UNDP), ECA has been assisting the country to formulate the NICI policy. The policy was completed and adopted as the national ICT framework by the Council of Ministers in March 2007. The process has moved to the next phase, which includes broad national consultations, translation of the policy into an implementation plan, and discussions on identifying and developing sectoral projects.

Kenya: The process of a comprehensive national strategy based on a broad national consultation has started in 2001. The process is being re-engineered by the current Government and a Stakeholders Convention was held in March 2004. Efforts are made to draft the document on National Strategy with the participation of all Stakeholders. The ICT policy framework prioritizes the following areas: economic impact, liberalization of key sectors, e-commerce, e-government and human resource development. There is a strong emphasis on economic growth, although interpretation suggests that it favours foreign investors at the expense of local investors.

In the meantime, the Kenya Government has chosen e-Government as one of its main priorities “towards the realization of national development goals and objectives for Wealth and Employment Creation”.

In This regard, in March 2004 and February 2006, the Government approved the e-Government Strategy and the National ICT Policy respectively. This is in recognition of the role of ICT in improving government service delivery, and as a potentially fast growing and employment generating in sector.

Economic Commission for Africa (ECA) continues to provide leadership and support towards the development and implementation of National ICT Plans, and in particular, the support capacity building of Kenyan Parliamentarians and other stakeholders on the role of ICTs in Trade and Economic Growth

Rwanda: Rwanda is one of the first African countries to embark on a NICI process and is currently the only sub-Saharan Africa country in the second cycle NICI. In 2001, the Government of Rwanda initiated a consolidated ICT policy and plan: the National Information and Communications Infrastructure (NICI) Plan I, running from 2001 to 2005, intended to accelerate Rwanda's development through ICTs. NICI II, which is about to be launched and will run to 2010, is the second phase of a 5-year rolling plan. The plan seeks to address some of our socio-economic challenges through the use of ICTs. Apart from creating a conducive investment environment to attract both local capital as well as foreign direct investment in this sector, the Government is adopting e-governance to promote efficiency, effectiveness and good delivery of services.

Tanzania: The National Information and Communications Technologies Policy was adopted by Cabinet in March 2003. The process has been launched for the development of the strategy. A request was sent to ECA to assist in developing the policy implementation plan.

Uganda: A draft national policy – Strategy for Developing a National Information and Communication Technology (ICT) Policy for Uganda - was completed in September 2002. The NICI plan is being developed. Meanwhile the competition is kept and the ICT sector is developing.

Comoros: The National Information and Communications Technologies Policy was adopted by Cabinet in March 2006. The Comoros intends to set up infrastructure, link all the islands by internet, and establish computer rooms in all schools and faculties, to democratize access by focusing on youth and women as well as spatial disparities in ICT and to engage in regional and international cooperation and partnerships in ICTs.

Madagascar: Madagascar has begun to take steps towards promoting ICTs for development with the adoption of two policies: 1) the national ICT policy in 2004 and 2) the economic and

social development policy, the Madagascar Action Plan for 2007-2012, which promotes the expansion of ICT infrastructure and access in the country.

The national ICT policy was developed by the Ministry of Telecommunications, Posts and Communication in collaboration with the United Nations Development Programme (UNDP). The integration of Madagascar into the globalization process is stated as one of the government's priorities. The strategic areas are infrastructure development, promoting content development and applications, capacity-building, and reviewing the institutional arrangements framework. The policy identifies health and education as key sectors. It further identifies the necessity to produce ICT specialists and adjust the education system to meet the requirements of the new generation that utilizes ICT facilities. It also proposes to introduce ICTs in all aspects of education and training.

3.3.3. Communications Regulatory Strategy

The change from the earlier regimes of monopoly State Corporations in communications whereby several new players compete with restructured State Corporations has precipitated the need for strong Regulatory Authorities to level the playing field, protect customers and ensure that state policies and goals are adhered to, hopefully leading to the expansion of physical infrastructure (networks). These measures were also geared to stimulating incumbent national telecommunication entities to provide services in a more efficient and effective manner. To date, however, the impact of deregulation and liberalization has offered a mixed bag of blessings and a number of countries in the subregion are counting the costs of their actions and assessing what they have gained. Even though there is "social" and "economic" regulation, the visible benefits have been limited to the slight increase of fixed lines and the explosion of cellular telephony in most countries. The roll out in rural telephony, the rigorous implementation of universal access goals, a level playing field for the emerging private sector weighted against access barriers such as high costs, affordability and geography/location remain major challenges. The extent to which regulation can stimulate the business community into providing investments, promoting innovation and ensuring competition remains subject of a number of ongoing and proposed studies in the subregion.

2.3.4. Lessons Learned and regional cooperation and integration

A number of lessons have been learnt over the past years in the development of national ICT plans and summarised below:

- Need for increased awareness
- Importance of the high level leadership
- The NICI process could be more participatory
- Need for learning from experiences of others – best practices
- Transition from ideas and concepts to concrete action plans
- Need for increased attention to sectoral policies and strategies
- Human and institutional capacity must be strengthened
- Prioritisation of external assistance
- Increasing regional cooperation and integration

2.4. Prospects

2.4.1. Emerging of new ICT areas

After the successful formulation of NICI plans, the countries have been requesting further assistance from ECA in sector-specific areas. Services required range from development of an implementation strategy to examination of the work programmes, to resource mobilization, development of sectoral strategies and monitoring of the implementation plan.

This underlines the importance of ECA's role in providing assistance for the formulation and piloting of sectoral policies and strategies. Special attention is being paid to e-governance, democratizing access, private sector development and content development to meet AISI and MDG objectives. In addition, ECA is proposing a new dimension of village information and communications infrastructure (VICI) plans to the existing process to extend policy-making and implementation. ECA will also place more emphasis on the expedited participation of the countries currently without a national ICT policy in the global knowledge society. However, from ECA's perspective, national e-strategies as part of the AISI goals will increasingly be geared towards addressing the Millennium Development Goals (MDGs).

2.4.2. Creating an enabling environment for ICT development

An enabling environment is a set of conditions which promote a sustainable ICT development in such a way as to promote socially desirable outcomes. The creation of an enabling environment is one of the key building blocks in the establishment of an Information Society – the World Summit on the Information Society (WSIS) Principles state that “ *The rule of law, accompanied by a supportive, transparent, pro-competitive, technologically neutral and predictable policy and regulatory framework reflecting national realities, is essential for building a people-centred Information Society. Governments should intervene, as appropriate, to correct market failures, to maintain fair competition, to attract investment, to enhance the development of the ICT infrastructure and applications, to maximize economic and social benefits, and to serve national priorities.* ”

In this subregion, the majority of countries have initiated reforms in their telecommunication sector by establishing a national regulatory body, introducing competition and at least partially privatizing their operators (among other measures).

However, much of the country's population still remains without basic access to ICT services, as further key reforms have yet to be undertaken in many countries. Although the majority of the population is still dependent on the conventional and traditional information delivery systems, especially radio, new ICT can greatly enhance the efficiency of these systems in delivering development information.

A fundamental shift in policy and regulatory frameworks is needed, to enable countries to achieve the WSIS targets by 2015. Political will is needed at the highest levels of government to create an enabling environment, to have a harmonized deployment of ICTs and seek to foster common regional infrastructure.

- (i) **Harmonization of Policies and Regulation** : development partners to promote harmonized policy and regulatory frameworks and best practices throughout East Africa, in collaboration with the Regional Economic Communities (RECs)
- (ii) **Human resource development**: In all countries human capital was developed through training, research and capacity building. Organizations such as universities and institutions of higher learning, research centers, polytechnics and training centers are affected in this area.

- (iii) **Fiscal and monetary policy issues:** Government in all of Eastern Africa countries have provided varying degrees of fiscal support ICT products and services across borders. Also they encourage cost sharing in executing joint projects at sub regional and regional level, particularly financing strengthening sub regional and regional backbones to enhance connectivity in the region (Rwanda, Kenya, Tanzania, Uganda)
- (iv) **ICT diffusion and increased ICT literacy**
 - a. strengthening of public institutions to improve their efficiency and effectiveness in achieving their development goals through ICT applications;
 - b. improvement and development of sector policies to encourage user-friendly and barrier-free technologies, including expanded provision of access to telecommunications and information systems, as well as policies on confidentiality, information security, and intellectual property rights;
- (v) **Development of ICT infrastructure:** International connectivity in the region is about to be transformed by the arrival of 2 possibly 3 international maritime fibre optic cables (TEAMS, Seacom and EASSY).
 - a. Development of the information infrastructure will be driven by the private sector as it mobilizes the private capital required to build the infrastructure and the related technological innovations (Concept One Network : Rwanda, Kenya, Tanzania, Uganda)
 - b. Development of ICT facilities and related networks and infrastructure environment notably water, electricity and housing remain the most pressing needs for many rural people.
- (vi) **Promoting Partnership and Cooperation:** Policies should address how public-private partnership (PPP) initiatives can be effective. It is particularly important for PPP initiatives to provide, support and use the information infrastructure, to encourage the deployment and use of ICTs within the economy and society. The right environment for the private sector should promote fair competition, opening up new markets, global opportunities and the delivery of high quality products and services.
- (vii) **Affordability issues:** Even where available, telephones, Internet access, television sets and so on are sometimes too expensive to be considered for household connectivity. (MTN Uganda recently unveiled a new tariff regime that allows dynamic discounting of up to 99 per cent on base rates depending on the location of the caller and the time of the call). There is a growing concern that, due to the asymmetric processes of information sharing, marginalised people are falling further behind in the competition for jobs, market shares, and common resource
- (viii) **Development and growth of the ICT industry:** Policies may encourage to develop application providing innovative technological solutions with relevant local content. How will the ICT industry (Hardware, Software, Services) contribute to growth of all sectors. (Rwanda, Kenya)
- (ix) **Gender issues:** There is a need for policies to address the issue of equal access of women to ICT.
- (x) Encourages non-biased and supportive policies on Internet Governance (East African Community)

2.4.3. Mainstreaming ICTs in regional integration strategies and plans

Information and communication technologies (ICTs) have substantial impact on regional cooperation and integration if the right policies, programmes and mechanisms are put in place. Therefore regional cooperation and integration efforts should mainstream information society and digital inclusion issues in their plans and programmes. The Regional Economic Communities (RECs) Partner States recognizes the importance of ICT in the challenges posed by globalisation, facilitating the regional integration agenda, and enhancing the socio-economic development prospects of the region.

In fact, RECs ensure regional ownership by reaching consensus on regional priorities with their Member countries, facilitating implementation of regional projects, regional & international protocols etc. linked to Economic Partnership Agreements (EPAs)

The Regional Economic Communities (RECs) like the Common Market for Eastern and Southern Africa (COMESA), the Inter-Governmental Authority on Development (IGAD), the East African Community (EAC), the Indian Ocean Commission (IOC), creates different spheres for regional cooperation addressing different aspects of ICT development (Policy and Regulatory Integration, Infrastructure Development, Capacity Strengthening, Partnership and Regional Cooperation, Promote investment)

However, the tripartite summit of the three organizations (COMESA, EAC, SADC), which took place in Kampala October 2008, directed the policy-making arms of all three groups to establish a joint program for the implementation of an accelerated, seamless, inter-regional ICT broadband infrastructure network within one year. The summit also called for a joint program for implementing a harmonized policy and regulatory framework that will govern ICT and infrastructure development across 26 member states.

Many initiatives are currently underway by international and regional specialized agencies and African development partners to promote ICT throughout East Africa, in collaboration with the Regional Economic Communities (RECs).

Regional infrastructure is identified by the all REC's Strategy Plan as a means of interconnecting Africa for contributing to economic growth, competitive trade and regional integration. The NEPAD e-Africa Commission, in collaboration with the Common Market for Eastern and Southern Africa (COMESA), the East African Community, the Inter Governmental Authority on Development (IGAD) and the Southern African Development Community (SADC), as well as other stakeholders, have undertaken to integrate and rationalize plans for the development of the fiber optic network in the Eastern and Southern region of the continent. COMESA has an initiative known as COMTEL, while SADC has its own plan known as SRIL. There are other initiatives (including those of utility companies), for fiber optic networks in this region

The Regional ICT Support Programme (RICTSP) is a joint initiative between COMESA, EAC, IGAD and IOC. The overall objective of the RICTSP Programme is to contribute to the Eastern and Southern African region's integration agenda through promoting an enabling Information and Communications Technologies (ICT) environment, which enables and stimulates economic growth and reduce poverty.

The key activities to be implemented are:

- Development and monitoring of ICT policy;
- Improved Internet connectivity in the region; and
- Improved access to information for public and private sector and
- Regional regulatory reforms to encourage private investments

The recently established Association of Regulators of Information Technology and Communications in East Africa (ARICEA) play a significant role in promoting cooperation and harmonization in the telecommunications and ICT sectors in their respective regions.

East African Community Regional e-Government Framework: The East African Community with technical assistance from United Nations Economic Commission for Africa (ECA) undertook to develop a harmonized policy and strategy framework for e-government among EAC partner-states. This framework is envisaged to cover all major aspects of regional cooperation on e-government.

Trade Facilitation Area: Government have provided varying degree of fiscal support for ICT. Facilitation programmes aimed at improving the free movement of goods, services and people along regional and continental

Policy Harmonization: COMESA has initiated programmes to harmonize ICT policies in the region as a basis for creating large markets to attract foreign investment to the region. It has adopted a drafted Model of ICT policy, which draws heavily on the SADC experiences. IT has also established an Association of Regulators of Information and Communication in Central and Eastern Africa (ARICEA) to stimulate regulatory harmonization based on the experiences of the Telecommunications Regulators Association of Southern Africa (TRASA). It has completed a study on ICT policies in its member states. ARICEA play a significant role in promoting cooperation and harmonization in the telecommunications and ICT sectors in Eastern Africa region. IGAD's strategies plan focused also on policy harmonization and promoting the use of ICTs in the areas of peace, security and sustainable development.

The African Regional Action Plan on the Knowledge Economy (ARAPKE), as Africa's Framework of Action to leverage ICTs for the realization of the Millennium Development Goals under the auspices of the African Union;

The Indian/Pan-African Satellite Project, which is a commitment from the Indian Government to partner with African Governments to foster various applications in health care, education, and others;

The Regional Satellite Communication Project (RASCOP); The NEPAD e-Schools Project, which is currently demonstrating the use of ICTs in six schools in each of the initial 15 African States that have committed themselves to the African Peer-Review Mechanism (APRM).

2.4.4. Institutional framework towards the development of ICT in Eastern Africa subregion

Institutions involved in regional cooperation vary in size and scope considerably. Most of the ICT cooperation in Africa takes place at:

- a. The level of Pan African bodies like the African Union (AU), African Development Bank (ADB), African Union (AU), African Telecommunications Union (ATU) and Economic Commission for Africa (ECA). These focus largely on the up-stream participation of African countries in global negotiations and the down-stream cooperation for the implementation of global regimes/ideals at local levels.
The African Union has a Commission that promotes human resources development, ICTs, and science and technology. The African Union has incorporated the development of information and ICTs as a key component of its strategic plan, especially in the context of the Partnership for Africa's Development (NEPAD).

ECA has been a key player in the ICT arena for the last twenty-five years, support on harmonization of sub regional policies and regulations in the Regional Economic Communities (RECs); raising awareness on the challenges and opportunities of e-commerce; facilitating the involvement of the private sector in Information Society issues; follow up of the World Summit on the Information Society (WSIS); and capacity building of Government officials and other stakeholders in several areas including measurement of the information society, development of Free and Opens Source Software (FOSS) and gender mainstreaming in ICT.

ADB is a development financial institution engaged in mobilizing resources towards the economic and social progress in the region. Its ICT programmes mainly relate to the development of telecommunications infrastructure in Africa.

ATU promotes major infrastructure and human resources development programme in the area of telecommunications.

- b. Regional initiatives such as the Regional African Satellite Communication (RASCOM), the New Partnership for African Development (NEPAD) and the E-Africa Commission that aim towards promoting horizontal cooperation for the expansion of ICTs infrastructure and applications through national and international investments
- c. Regional Economic Communities (RECs), such as: the Common Market for Eastern and Southern Africa (COMESA), the Inter-Governmental Authority on Development (IGAD), the East African Community (EAC), the Indian Ocean Commission (IOC), that focus in all aspects of cooperation (horizontal, upstream and downstream). The regional association for regulators attached to these RECs such as the East African Associations for Regulators, Post and Telecommunications Operators (EARPTO) and a recently established Association of Regulators of Information Technology and Communications in East Africa (ARICEA) play a significant role in promoting cooperation and harmonization in the telecommunications and ICT sectors
- d. Emerging loosely organized research networks like the Research ICT Africa! and the African Technology Policy Studies Network (ATPSnet) that aim to increase Africa oriented independent research in the ICT field in order to feed these into policy making.

3. CONCLUSIONS AND RECOMMENDATIONS

The overall growth performance of the Eastern Africa subregion over the past three years has been sustained and remained at rates above 6.0 percent. The growth rate of 2008 has slowed slightly to 5.7 percent, under the drag of falling export demand and financing, lower commodity prices, and much tighter external financing constraints. The outlook for 2009 shows a little recovery although some countries in the subregion will continue recording growth rates above 6.0 percent. The key concern for the subregion remains that despite sustained economic growth, this growth has not yet translated into poverty reduction. The Eastern Africa subregion has the highest proportion of people living in extreme poverty and deprivation, and many countries are unlikely to meet the Millennium Development Goals (MDGs) target, unless wide-ranging policy actions are taken by countries.

3.1. Accelerating progress towards MDGs will remain a challenge in 2009

Although many countries in the subregion have recorded positive developments in recent years to meet the MDGs, accelerated progress will be required to scale-up efforts both at national and subregional levels. Acceleration of progress will certainly be constrained by a number of important challenges, which include: lack of financial resources, both internal and external, infrastructure bottlenecks, weak governance, low investment levels and others.

The global food-fuel and financial crises and the threat of climate change certainly constitute additional threats to efforts undertaken by countries in Eastern Africa to boost their economies. At this critical time, it is necessary that countries in Eastern Africa pursue implementing economic reforms, including those related to mobilization of domestic resources. At the same time, it is important to engage in dialogue with donors to not reduce Official Development Assistance and honor their pledges to increase ODA in view to achieve development targets, in conformity with earlier commitments.

Countries recognize that domestic resource mobilization is the most reliable and sustainable source of development finance. Thus they need to take concrete actions to boost domestic savings, including exploiting the development potential of microfinance institutions, and channel those resources into productive investment and social sectors, as well as channeling remittances to productive uses.

The crisis will also have an impact on food security. Lack of working capital can have detrimental effects on farmers' ability to maintain food production. Governments may be forced to scale back investments in agriculture and critical rural infrastructure projects needed to sustain and improve agricultural productivity. With reduced incomes, poor people will be further excluded from accessing food for their daily survival. The key question is how to ensure food security in Eastern Africa subregion. There is an urgent need for strong policy actions in the agricultural sector meant at expanding food production by enhancing investments and productivity, including in small-scale farms, and promoting rural development and intensifying agricultural research.

3.2. Promoting international trade and competitiveness

The contribution of international trade in the promotion of economic development and poverty alleviation is widely acknowledged. Although Eastern Africa subregion represents more than 30% of the total continent's population, its share to external trade represents less than 6% of the Africa's trade and less than 0.5 % of the world trade. Available data indicate that exports

increased moderately while imports increased substantially, predicting current account deficits. Some of the reasons behind the low performance of exports in Eastern Africa include weak marketing, poor rural infrastructure, lack of credit and agricultural inputs. Policies should be set up to unlock Eastern Africa's huge economic potential through partnership public-private.

Countries have to remove such obstacles to export promotion as poor infrastructure and lengthy customs procedures that increase transaction costs. They should also diversify their production and export structure to reduce vulnerability to external shocks and increase their share of benefits from trade.

3.3. Accelerating the development of ICTs

All countries in Africa recognize the importance of infrastructure for economic growth, job creation and poverty reduction. It is further acknowledged that information and communication technologies can foster intra-regional trade and accelerate the region's integration into the global economy. In the context of a global knowledge economy fuelled by the fast pace of technological innovation, it is important for developing countries to lay good foundations for building their capacity to acquire and create knowledge and technology in order to take advantage of the opportunities offered by globalization and, at the same time, to address emerging global challenges.

In the Eastern Africa subregion, ICTs are still characterized by low levels of penetration and cover, unsatisfied connection applications and important waiting lists, a low level quality service, high investment costs and tariffs compared to international standards. It is therefore necessary to create conditions conducive to the development of this promising sector in order to attract local, regional and international investors. The strategy will consist in developing and implementing a series of measures aimed at increasing the sector's efficiency through the creation of an environment enabling entry of new operators and the participation of a large number of stakeholders from the private sector, the public sector and the civil society.

Specific measures may include, among others: the privatization of telecommunication network so as to attract foreign investors, establishment of rural telecommunication projects to connect rural areas, extending microwave links, promote training centres in ICT, reduce prices, and encourage rapid development of subscription to cellular phones and improve tele-density.

The regional dimension is very important. Although each country develops specific projects to meet national needs as regards ICT infrastructures, it will also be necessary to promote regional integration through regional projects meant at enhancing connectivity and reducing telecommunication costs.