

ICTs and Regional Economic Integration: An Anticipatory Scenario for the Horn of Africa

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Abstract

Development experts are telling increasingly fascinating stories about how human development indices (HDI) among the poor in Africa, Asia, and Latin America have been buoyed by the diffusion of ICTs (Information and Communication Technologies) over the last two decades. According to data compiled by the World Economic Forum, ICTs have facilitated faster and more reliable communication with regard to almost all important spheres of life including healthcare, education, agriculture, commerce, e-banking, the environment, etc. Perhaps the greatest impact of ICTs has been in their democratizing effect and their role in promoting gender equity, especially with regard to access to information that affects basic facets of life which has been beyond reach before either because of geographic distance or because of a lack of facilities such as libraries and clinics. This paper employs the anticipatory scenario-building approach in offering an analysis of potential development implications of ICTs for the Horn of Africa region.

Keywords: *Human development, economic integration, ICT*

“Technology per se does not solve social problems. But the availability and use of information and communication technologies are a pre-requisite for economic and social development in our world. They are the functional equivalent of electricity in the industrial era. Econometric studies show the close statistical relationship between diffusion of information technology, productivity and competitiveness for countries, regions, industries and firms.”

Manuel Castells

Introduction

Development experts are telling increasingly fascinating stories about how human development indices (HDI) among the poor in Africa, Asia, and Latin America have been buoyed by the diffusion of ICTs (Information and Communication Technologies) over the last two decades.¹ According to data compiled by the World Economic Forum,² ICTs have facilitated faster and more reliable communication with regard to almost all important spheres of life including healthcare, education, agriculture, commerce, e-banking, the environment, etc. Perhaps the greatest impact of ICTs has been in their democratizing effect and their role in promoting gender equity, especially with regard to access to information that affects basic facets of life which has been beyond reach before either because of geographic distance or because of a lack of facilities such as libraries and clinics.³

This paper employs the anticipatory scenario-building approach⁴ in offering an analysis of potential development implications of ICTs for the Horn of Africa region. The Greater Horn of Africa (Ethiopia, Eritrea, Somalia, Djibouti, Kenya, Uganda, South Sudan and Sudan) was selected

because, by all U.N. and World Bank indices, the region comprises some of the least developed countries in the world, gauging from indices such as infant mortality, life expectancy, and per capita income.⁵ It also represents the largest concentration of “failed states” according to Fund For Peace classifications, a U.S. think tank.⁶

Reasons for this sorry predicament abound, but one of them is that the region has endured some of the longest civil wars in modern world history. Eritrea’s secession from Ethiopia in 1992 was the culmination of a 30-year civil war. The secession of South Sudan from Sudan in 2011 was the culmination of a 28-year civil war. And in Somalia – the theater of a 35-year civil war – the secession of the northern half declared in 1991 threatens to split the country into two or more states. Of the “failed states” of the Horn of Africa, Somalia is at the very bottom in terms of most human development indices.⁷ The country had no government for more than 20 years and had a majority of her population either exiled or internally displaced for the last 30 years.⁸

Because of its status within the club of failed states, we will focus on Somalia’s potential for anchoring regional development through deployment of ICTs. We will consider the country’s role in implementing development initiatives put forward by the main regional organization whose mission is to promote development, the Intergovernmental Authority for Development (IGAD), using the anticipatory scenario-building approach.

Anticipatory scenario building is widely used by development experts and change agents who are keen to influence the course of development processes by looking at various likely future outcomes and recommending the best route to the most ideal scenario. According to one definition, “Anticipatory scenarios — also known as prescriptive or normative scenarios — start with a prescribed vision of the future and then visualize how this future could emerge.”⁹ Anticipatory scenarios are useful in attempts to head-off possible undesirable outcomes with respect to the convergence of relevant situations for development. Scenarios can be constructed either inductively or deductively depending on the realization of a complete array of necessary elements to bring about a desired outcome.¹⁰ In our Horn of Africa scenario, we will rely on the inductive method where observations are made and thereafter theories are formulated, as all elements required for an ideal development outcome are present in the Somalia context. The elements include: (1) the attainment of a measure of peace and stability and the installment of a functioning government, albeit one that is still relatively weak, (2) the clear development of a “reverse brain drain” process in which Western educated young Somalis return home to establish businesses, (3) the presence of a Somali business diaspora in almost all the neighboring Horn of Africa countries, thus contributing to an informal integration of regional economies, (4) the fast diffusion of ICTs in Somalia and the rest of the Horn region, and (5) African Union and donor-country pressure on governments in the region to effect formal economic integration.

Role of ICTs in Economic Development

Current literature on social and economic development uniformly affirms the consensus that ICTs (here defined as the combination of Broadband Internet and mobile communications) is indispensable for economic growth and enhancing a wide range of human development indices. A

UNDP study in 2006 (*Realizing the Millennium Development Goals: Promoting ICT for Human Development*)¹¹ found that ICTs affected human development in several important ways: (1) ICTs boosted economic growth: Within just 6 years last decade, global spending on ICTs quadrupled with a corresponding expansion of cross-border commercial activity that boosted GDPs across the board in 12 Asian countries alone. (2) ICTs enhanced human productivity, in large measure by breaking several barriers.

ICTs Break Barriers to Knowledge

The internet is a major delivery mechanism for information and knowledge to segments of the population that lacked access before. With access, even those with limited education were enabled to gain greater knowledge of one's chosen field of interest. This is what communication experts have called the "normalization hypothesis"¹² or the democratizing effect of ICTs. In numerous studies from different regions of the developing world, experts have noted how gender gaps in knowledge, for example, are bridged by the acquisition of ICT skills such as navigating the Internet.¹³ Because websites have been set up in numerous vernacular languages, barriers to knowledge have come down for villagers in remote parts of developing countries such as India and sub-Saharan Africa.¹⁴ For this reason, ICTs are increasingly used for life-long learning in continuing education programs as well as re-integrating unemployed people into the workforce.¹⁵

ICTs Break Barriers to Participation

Internet discussion groups throughout Africa and the developing world contribute to creation of vibrant public spheres that have had emancipatory benefits for hitherto voiceless groups. Examples include an online radio campaign against the caste system in Somalia, challenges to patriarchal injustices against women in Uganda, and the use of blogs in the Malala case in Pakistan that spotlighted the extent of inequality for girls in some eastern cultures (Malala is the 14-year-old schoolgirl who was shot in the head by a Taliban gunman for speaking up in favor of education for girls).¹⁶

In areas where the media are strictly controlled, the Internet has afforded various groups a forum for political mobilization and greater civic participation. This has been especially true in Somalia recently when Islamist extremists intimidated journalists through the threat of torture and murder.¹⁷

ICTs Break Barriers to Economic Opportunity

ICTs require less initial capital investment than most other commercial and business ventures. A small tomato farmer in Ethiopia can find a reliable buyer of her produce through the Internet and thus start a more robust business.

As a result, ICTs lower the barrier to entry into the economy for millions of small entrepreneurs, producers, and women. ICTs make it possible to overcome the challenges of distance by vastly expanding markets for small entrepreneurs. The 2006 UNDP report included uplifting examples of vastly expanded horizons of human experience for the poorest and least

educated villagers. Examples include poor rural Indian women adopting e-mail as a cost effective alternative to telephone calls; Indonesian villagers using the Internet to sell handcrafted ornaments, some for as much as \$100 apiece; and small farmers in Sri Lanka raising their income 15-35% by using the Internet to market organically grown vegetables and fruits to European and other Asian customers.¹⁸ But as the challenges of the digital divide illustrate, most of Africa's poor and illiterate masses cannot take full advantage of these opportunities. They are limited by what communication experts have called the "digital divide" and its constraints.

First and Second-level Digital Divides

The digital divide refers to disparities in both access and patterns of use of the Internet between various SES groups within society.¹⁹ Economists and social scientists alike note the detrimental effects of the digital divide for faster economic growth and social integration in the developing world, especially in sub-Saharan Africa.²⁰ Since the onset of the current "Information Age", two kinds of digital divides have been identified.

The first-level digital divide refers to disparities in *access* to the Internet between higher and lower SES groups in society. In earlier decades of Internet diffusion, this issue was acute even in the most advanced countries when segments of the population in the lower socio-economic classes had limited access to the World Wide Web.²¹ The concern for more advanced nations (including the United States), has now shifted from issues of *access* to questions of the *nature of use* of the Internet. This is called the second-level digital divide. Many studies show that the social stratification identified in the first-level divide is largely kept intact in the second level divide in spite of appearances of equality as gauged from what is termed the "normalization hypothesis."²² Through survey research in numerous contexts, experts have established that while better educated classes use the Internet for information seeking purposes that enable them to take advantage of opportunities for advancement in society, a majority of those in lower SES classes are unable to do so, instead only using the Internet for recreational and entertainment purposes only. Mere access thus fails to guarantee equality of economic opportunity for all segments of the population (Hargittai and Hinnant, 2008; Mossberger, et al., 2005). The problem for African economies — especially for those in the Horn of Africa — is that they are being constrained by the effects of both the first- and second-level digital divides. Our anticipatory scenario-building approach will consider how countries of the Greater Horn region may mitigate the effects of these barriers.

Regional Economic Integration and the Potential Role for Somalia

International trade is assuming ever increasing importance in the global economy with its contribution to the global GDP set to rise to 50% by 2020 according to U.N. economists.²³ World Bank data indicates that Africa is the region least integrated into the global economy.²⁴ It is also the least internally integrated region economically in the world with intra-African trade accounting for only 10% of the continent's total trade. This contrasts sharply with intra-European trade at 77%, inter-ASEAN trade at 47%, inter-North American trade at 49%, and inter-Latin American and Caribbean trade at 34% (World Bank press release, 2010).

Following agreement on the Abuja Protocol of 1991, African heads of state agreed to establish several trading blocs as part of a long-term plan to integrate the continent economically as a whole by first integrating separate geographic regions.²⁵ The Abuja Protocol set a specific timeline for achieving full African economic integration by 2034. Important intermediate goals to be realized along the way include: (1) the creation of regional trading blocs by 1999; (2) strengthening Regional Economic Community (REC) coordination and harmonization by 2007; (3) the establishment of free trade areas and customs unions within each REC by 2017; (4) the establishment of a continental common market by 2023; (5) the establishment of a continental economic and monetary union by 2028; and (6) the attainment of a full and functioning African Economic Community with a single currency and the free flow of goods and services among all African states. Of all the African regional trading blocs, IGAD (of the Horn of Africa) represents the least developed region with members making no effort at integration whatsoever.

IGAD's counterparts among African trading blocs such as the Common Market for Eastern and Southern Africa (COMESA), the East African Community (EAC), Economic Community of West African States (ECOWAS) and Southern African Development Community (SADC) have all taken strident steps towards meeting the goals of the Abuja economic integration timetable. All these organizations have reached agreements establishing their blocs as trading partners and economic entities and are already functioning as free trade areas. Most have established customs unions to facilitate the free flow of goods and services among member states. With the exception of COMESA, all have either ratified or have made substantial progress towards establishing a common market. All have also scheduled specific dates within the next 2-5 years to achieve full economic and monetary union.

By contrast, IGAD members have yet to take a single step toward economic integration. Clearly, the long history of wars and civil wars in the region has precluded all chances for progress toward economic integration in this region (see Table 1 under appendices); however, opportunities have now opened up, especially with the cessation of armed conflict in Somalia and a strong Pax-IGAD order seemingly established over the region. The fact that there has been little economic integration means that opportunities for faster development are greater here than elsewhere on the continent. Countries in the Horn of Africa represent a 237-million people market where each country has specific strengths that can make economic integration a bonanza for the entire region.

Ethiopia, Uganda, and South Sudan are landlocked countries with a combined population of 140 million. Diversification of their economies — which is a goal for most developing countries — will require external markets to grow and develop, while at the same time they can serve as next-door markets for their Horn of Africa neighbors. Uganda's economy can easily be integrated with South Sudan's where complimentary needs in energy, agricultural, fishing, and educational resources exist. Kenya offers more advanced infrastructure, especially in broadband and ICT utilization. In the East Africa region, Kenya was first to connect to international Internet backbone channels through a submarine fiber optic cable. Also, Kenya offers the most advanced ICT-based trading experience in the region. Somalia's natural resources and her people's entrepreneurial spirit remain untapped for sustained regional growth and economic development. One of Somalia's

advantages is that her citizens already make-up a significant part of the business communities in Kenya, Ethiopia, South Sudan, Djibouti, and Uganda. No other nationality in the region has such far flung business connections throughout the Horn of Africa as do Somalis.

Much informal trade is conducted by Somali merchants between and among all Horn of Africa states, with the possible exception of Eritrea. Because it is mostly informal trade, it is hard for any reliable assessments of the volume of such trade to be made, but it is estimated to run into at least a few billion dollars annually, excluding trade in the stimulant *Qat*.²⁶

One of the most celebrated examples of Somali economic ingenuity and business acumen is the marvelous story of Nairobi's Eastleigh district where Somali businessmen and women, who fled the civil war in the 1990s, set up shop. As soon as the refugee merchants descended on Nairobi, they became a dominant commercial and business force that overshadowed all other commercial centers and activities in Kenya. Indeed, non-Somali economists have observed that Eastleigh's commercial reach has engulfed the entire East Africa region, not just Nairobi or Kenya:

Nairobi's Eastleigh estate has gained fame due to its rapid development into a commercial hub of East Africa sustained by much investment from the Somali Diaspora and trade networks stretching as far as China.²⁷

Similar experiences born of Somali entrepreneurship are replicated in Kampala, Addis Ababa, Juba, Diredawa, Djibouti, and elsewhere in the Horn of Africa, albeit on a smaller scale than Eastleigh's. The extraordinary success of Somali entrepreneurship is attributable in large measure to Somali culture and the social structure of extended family relationships in the context of strong collectivist norms. Many successful commercial ventures and business models are voluntary cooperatives in which a dozen or so close family members pool resources in order to attain a competitive edge in an otherwise free capitalist market. One investigative report in a Kenyan newsweekly that attempted to find explanations of the mystery behind the fast and extraordinary business success of a refugee community concluded that:

Speculations remain rife over the source of wealth that fuels the economy in Eastleigh. To answer that, one has to understand the intricacies of the tightly-knit ethno-economic networks that characterize how Somalis do business and relate with each other. You can call it informal socialism, or even better, an ethnic cooperative.²⁸

The article went on to note that Somali restaurant businesses alone have achieved such remarkable success that they have forever changed culinary tastes and habits of many native Kenyans as well as thousands of international travelers who visit Kenya as tourists. Somali cuisine reflects a multicultural mix of African, Italian, Arab, Turkish, and Indian influences which have made most travelers feel at home in Somali restaurants or other business establishments. This adaptability to change is another reason why Somalis are well-positioned to help integrate the economies of the Horn of Africa region.

A new dimension that Somali businesses have acquired over the last two decades that promises to facilitate cross-border business and trade is the use of ICTs.

ICTs in Somalia and the New “Digital Generation”

Even during the darkest moments of Somalia’s civil war, many development experts marveled at Somalia’s advanced communication technology infrastructure, widely acknowledged as one of the most advanced in sub-Saharan Africa.²⁹ The inordinate rate of diffusion of ICTs was precipitated in large measure by the single most transformative element that has defined the Somali condition over the last few decades: the forced exodus of about a million of the country’s urbanites, including much of her technocratic and educated classes.

The resilience of the Somali economy in the face of total anarchy and the absence of a formal banking system have equally fascinated economists;³⁰ however, there is little mystery to this as it was accomplished through a combination of the survivalist grit of Somali culture and the use of modern communication technologies. Throughout the 35-year civil war, arguably the most successful businesses in Somalia have been ICT firms.³¹

Telecom Somalia was one of the first ICT companies in the country when it began operations in 1994. Soon, many more followed, including *Golis*, *Somtel*, *Hormuud*, and *Soma Phone*. All these businesses started as telecommunications companies offering mobile and landline telephone service. The Internet was late to arrive in Somalia, coming in 1999 at the height of the civil war. Nonetheless its rate of diffusion has been phenomenal: Within a year, 500,000 individuals, businesses, and educational institutions had signed up as subscribers.³² This is phenomenal considering Somalia’s population is only 10 million.

Today, a broad range of Internet services are available to customers in 70% of Somalia’s territory. Most users access it through cyber cafes which can be found in bigger towns throughout the country. *Hormuud Telecom* was the first to introduce mobile internet in 2010 using General Packet Radio Service (GPRS) technology. The service was widely available but had limited capacity because of the lack of broadband Internet until November 2013. *Hormuud’s* GPRS-based service, for example, operated at a speed of 50 kilobytes per second, which was extremely slow. Service at most Internet cafes was equally slow, forcing clients to patronize the businesses in the evenings when download speeds were a tad faster. Business and educational institutions paid a premium for limited broadband services before the installation of fiber optic cable late in 2013. Rates for such service ranged from \$300 to \$600 per month — exorbitant prices for individuals by any standard. Even though three international backbone lines are laid undersea off its long coastline, Somalia got broadband Internet only in November 2013, thanks mainly to furious pirate activity offshore for decades. Most of Africa, however, did not have much of a head-start, as most countries with broadband capacity got connected to global backbone lines in 2010 when submarine fiber optic cable was laid in time for the World Cup tournament in South Africa.³³

Despite this setback, Somalia has been home to a thriving e-Commerce sector that was greatly facilitated by the widely popular mobile money services used even in remote areas. The lack of a formal banking sector coupled with the perpetual security situation in much of the country have provided the motivation to invest in mobile money services popularly known as *Zaad*³⁴ at the expense of other life necessities. Instead of carrying cash, customers pay for all transactions electronically by mobile phone. They do this routinely either in person at a business establishment

or remotely from hundreds of miles away. This has greatly facilitated commercial activity and broadened the customer base for almost all businesses.

It is important to note that all *Zaad* (Mohamed, 2013) purchases are transacted in U.S. dollars. This increases the potential to conduct cross-border e-Commerce, which Somali merchants in Kenya, Uganda, Ethiopia, Djibouti, South Sudan, as well as Tanzania engage in freely.

The “Reverse Brain Drain” Effect

The rise of China and India and the greater liberalization of sub-Saharan African economies have created new immigration trends in which former emigrants are returning home.³⁵ With peace returning to Somalia, this will be another advantage. Most of the million Somalis who emigrated as a result of the civil war settled in advanced countries of Western Europe, North America, and Australia, and smaller percentages settled in the Gulf States of Arabia. Regardless, however, a common feature among all Somali immigrant communities is the emphasis on education for their children.³⁶ This emphasis has paid off in the form of highly skilled Diaspora communities, great proportions of whom maintain residual allegiances to the “motherland.”

Consequently, Somalia is getting a new generation of Western-educated entrepreneurs who are not hampered by the constraints of first- or second-level digital divides as most non-diaspora Somalis are.³⁷ They have a role in mitigating the effects of the digital divide. Somalia stands to gain more from the relative size of the “reverse brain drain” effect that thousands of ICT-skilled entrepreneurs will exert on an otherwise unregulated economy. In much of Africa, ICT-related businesses are the biggest draws for skilled workers returning to more lucrative opportunities than they had in their adopted Western countries. According to the *Christian Science Monitor*, “African diaspora are beginning to return home, attracted by better opportunities, increasing political security, and a growing market buoyed by the spread of technology.”³⁸

The other side of the immigration coin for Africa has had positive economic effect too, through remittances that are estimated to run into billions of dollars annually. According to World Bank data, sub-Saharan Africa received \$31 billion in remittances in 2012.³⁹ The UNDP estimated Somalia’s share of remittances in 2012 to be \$1.6 billion.⁴⁰ For a country of about 10 million people, that is higher in per capita terms than any other country in Africa.

This combination of capital and skill has spurred new investments in ICT infrastructure and software in Somalia. Dubai-based Somali entrepreneurs who hold a significant stake in the East African cell phone market are creating employment for young skilled workers in the ICT sector.⁴¹ As a percentage of the total population, these new entrepreneurs with high computer and Internet literacy give Somalia the digital advantage over her neighbors in an integrated regional economy. Furthermore, the presence of vibrant Somali business communities in Kenya, Uganda, Ethiopia, South Sudan, and Djibouti has already laid the foundation for much informal trade in the Horn of Africa region. The return of thousands of business-minded entrepreneurs promises to cement the commercial bonds that will pull the economies of the Horn of Africa closer together.

Use of ICTs for Regional Economic Integration

When Horn of Africa governments prepare to implement the African Union (AU) mandate to integrate their economies, ICTs will have to be deployed to facilitate trade. ICTs are more ubiquitous today in global trade and commercial transactions because of expanded pressures for faster and safer deliveries in a security-conscious world. Also, the greater flow of goods in a globalized environment that is more averse to corruption and tampering has necessitated the deployment of ICTs in all phases of the trading process from the port of origin to the final destination. Three main areas of ICT use can therefore be identified for trade efficiency and coordination: (1) the facilitation of efficient and transparent flow of goods through customs, (2) the management of transport logistics, and (3) the facilitation of intelligence and risk management.

ICTs Facilitate the Efficient and Transparent Flow of Goods through Customs

Automation of customs duties can greatly affect timeliness of deliveries, cost of goods, and reliability of service. Because customs perform too many important chores in the trade process (e.g., monitoring the cross-border flow of goods, ensuring compliance with existing government regulations, collecting taxes and applicable tariffs, and guarding against admitting illegal merchandise) their modernization through the deployment of ICTs is extremely critical for efficient and reliable cross-border commercial activity of any kind. Furthermore, this has become a requirement enshrined in the Kyoto Convention of 1999 on “Simplification and Harmonization of Customs Procedures.” All signatories of the agreement (WTO members) are required to implement the modernization of customs accordingly.⁴²

ICTs and Management of Transport Logistics

Beyond customs, many other transportation-related activities can prove essential for moving goods, services, and money along trade routes. These include the management of transit freight operations, warehousing at seaports and airports, and harmonizing distribution and payment systems. Without the use of ICTs, each of these operations could lead to transit delays that contribute to dramatic cost increases. With delays, movement of merchandise can become subject to corruption, something that has saddled inter-African trade.⁴³ To measure the detrimental effect of delays in executing transportation logistics, the World Bank developed the Logistics Performance Index (LPI), a composite coefficient that measures “transport and information infrastructure, supply chain management, and trade facilitation capabilities at ports and airports.”⁴⁴ African countries get the lowest scores on the LPI index with the Horn of Africa countries at the very bottom.

ICT as Facilitators of Intelligence and Risk Management

All trade management regimes require enforcement of a host of other rules and regulations beyond the work of customs departments. These include seaworthiness of small boats that ferry cargo from docks, compliance with loading limits on transit trucks, and proper transportation of hazardous industrial goods, to name a few examples. In Africa, informal trading offers ample opportunities to circumvent any existing rules. But even in formal trading situations, unscrupulous

merchants may be tempted to mislead enforcement agencies by misrepresenting either the quantity or even the nature of the cargo being hauled. Inspections can therefore be cumbersome and time-consuming, thus rendering the entire process highly inefficient. In order to strike the right balance between security and efficiency, trading partners need to ensure the reliability of the information which they have to share about shipping consignments. One important condition for this is the standardization of information entry systems so that data on consignments are entered once arriving at the source and are thereby easily shared with and processed by trading partners. ICTs are the only vehicle for attaining the standardization of data entry among trading partners as well as improving and maintaining efficiency.

Conclusion

Much of the post-colonial history of the Horn of Africa region is marked by bitter armed conflicts. All the states of the region except Kenya have seen long civil wars or wars against neighboring states. Indeed, the Somali-Ethiopian war of 1977-8 is considered the most brutal between any two independent African states.⁴⁵ The second most brutal was also fought in the region between Ethiopia and Eritrea.⁴⁶ The prolonged conflicts have precluded any chance of regional economic integration; however, inter-ethnic animosities which fueled the civil wars in the region show signs of subsiding. IGAD's mission is to secure peace through economic development and integration, as are the missions of common regional think tanks⁴⁷ who are betting that intertwined economic interests will induce peaceful coexistence.

Somalia's prospects for development look promising for the first time in a long while. The combination of regional peace and diffusion of ICTs bodes well for a better future for the entire Horn of Africa region. The Somali component of regional trade already shows remarkable elements of integration and its benefits. Much of the integration is informal, however, and although goods and services flow fairly freely across most borders in the region, transactions are not conducted in the context of formal trade agreements. Without formalization the countries of the Horn of Africa lose control over merchandize in a way that not only loses revenues, but could also pose health and security risks to the public in the region. With deployment of ICTs in cross-border commerce, this threat can easily and safely be averted on the path to greater regional integration and prosperity.

References

- Abdinasir, Mohamed & Childress. (2010). S. Telecom firms thrive in Somalia despite war, shattered economy. *Wall Street Journal*, May 11,
- Abdilatif, Dahir. (2010). The nomad's way of doing business: A guide to Somali commerce, *Africa Review*, October 11,
- Africa Renewal. (2013). Somali diaspora's remittances cast a lifeline. *Africa Renewal*, May Issue, p. 8
- Balancing act. (2014). Somalia's civil war hides steady growth of Internet services. Retrieved from: Issue No. 345 <http://www.balancingact-africa.com/news/en/issue-no-345/top-story/somalia-s-civil-war/en>
- Carrier, N. & Lochery, E. (2012). More than little Mogadishu. *Focus on the Horn*, July 25. Retrieved from: <http://focusonthorn.wordpress.com/2012/07/25/more-than-little-mogadishu/>
- Chris Manning, C. (2008). Brain drain and brain gain: A survey of issues, outcomes, and policies, in the least developed countries. *UNCTAD Least Developed Countries Report 2007, Background Paper #6*. Geneva: United Nations Press
- Enock, Yonazi, Tim Kelly, Naomi Halewood, & Colin Blackman. (2012). eTransform Africa: The transformational use of ICTs in Africa. eTransformAfrica.org
- Fund for Peace. (2013). *Failed state index: 2013 rankings*. Washington, DC. Retrieved from: Fund for Peace. <http://ffp.statesindex.org/>
- Gabe, Joselow. (2013). Somali diaspora drawn back to Mogadishu. *How We Made It In Africa*. Retrieved from: <http://www.howwemadeitinafrica.com/somali-diaspora-drawn-back-to-mogadishu/31757/>
- Gebru, Tareke, "The Ethiopia-Somali war of 1977 revisited," *International Journal of African Historical Studies*, Vol. 33, No. 3. Pp. 635-667, 2000.
- Godet, M. (2000). The art of scenarios and strategic planning: Tools and pitfalls. *Technological Forecasting and Social Change*, (65), 3-22,
- Harper, M. (2012). The Somali millionaire 'thanked' for being rich. Retrieved from: <http://www.bbc.com/news/magazine-18117255>
- Hargittai, E. & Hinnant, A. (2008). Digital inequality: Differences in young adults use of the Internet. *Communication Research*, (35), 602-621.
- Kidane Mengisteab and Redie Bereketeab (eds.). (2012). *Regional Integration, identity and citizenship in the Greater Horn of Africa*. London: James Currey, pp.143-169
- Klaus Schwab (ed.). (2013). *The global competitiveness report 2013-2014*. Geneva: World Economic Forum.
- Kusow, A & Bork, S. (2007). *From Mogadishu to Dixon*. Trenton, N.J.: Red Sea Press,
- Lucas, R. B. (2006). Migration and economic development in Africa: A review of evidence. *Journal of African Economics*, 15(2), 337-395,
- McCarty, M. (2012). Schoolgirl from Pakistan teaches the world a lesson. *Dayton Daily News*, Oct. 28, Life & Arts Section, p. D4.

- Mohamed, A. "Radio and the propagation of pro- and anti-Ethiopian narratives in Somalia. Discussion of the Greater Horn Horizons Forum
- Mutua, W. (2013). Investing in the telecoms, mobile, and broadband markets in Somalia. *Afrinnovator*, May 31, Retrieved from: <http://afrinnovator.com>
- Mahmoud, Mohamed. (2012). Internet accessibility growing steadily in Somalia, Retrieved from: http://www.hiiraan.com/news4/2012/Oct/26384/internet_accessibility_growing_steadily_in_Somalia.aspx
- Momo, R. S. (2000). Expanding women's access to ICTs in Africa, in Rathgeber and Adera, (eds.). *Gender and information revolution in Africa*. 169-186
- Mossberger, K., Tolbert, C. & McNeal, R. (2005). *Digital citizenship: The internet, society, and participation*. Cambridge, MA.: MIT Press,
- Munyua, H. (2000). Application of ICTs in Africa's agricultural sector: A gender perspective, in Eva M. Rathgeber & Edith O. Adera, (eds.) *Gender and the information revolution in Africa*. Ottawa: IDRC Books, 85-124;
- News from Somalia. (2013). How qat destroys the Somali economy and threatens her security. Retrieved from: <http://newsfromsomalia.wordpress.com/2013/01/08/warbixin-qaadka-oo-caqabad-ku-ah-dhaqaalaha-iyo-nabadda-soomaaliya/>
- Norris, P. (2001). The digital divide: Civic engagement, information poverty and the internet worldwide, in P. Howard, & S. Jones (eds.), *Society online*. Thousand Oaks, CA: Sage.
- Nur, M. A. (2012). *Warbixin: Tirada suxufiyiinta lagu dilay Soomaliya iyo magacyadooda*. Retrieved from: <http://www.ishabaydhaba.com/?p=29747>
- Ogilvy, J. (2012). *Facing the fold: Essays on scenario planning*. London: Triarchy Press,
- Opoku-Mensah, A. (2000). ICTs as tools of democratization—African women speak out, in Eva M. Rathgeber and Edith O. Adera, (eds.) *Gender and the information revolution in Africa*. Ottawa: IDRC Books, pp. 187-203
- Parkinson, S. (2005). *Tele-centers, access and development: Experience and lessons from Uganda and South Africa*. Ottawa: ITDG Publishing
- Pflanz, M. (2012). Reverse brain drain: 'African lion' economies vs. West's fast track. *Christian Science Monitor*, Sec. N, p.1.
- Shepard, R. (2008). *Cultural adaptation of Somali refugee youth*. El Paso, TX.: Lfb scholarly Publishing, LLC.
- Souter, D., Adam, L., Abiodun Jaguna, & Tusu Tusbira. (2012). ICTs for regional trade and integration in Africa. Retrieved from: eTransformAfrica.org
- Tariku, Debrtsion. (May 16, 2013). "To solve the Ethiopian Eritrean conflict, a change in the psyche of the power elites is essential," Available at <http://www.asmarino.com/articles/1751--to-solve-the-ethiopian-eritrean-conflict-a-change-in-the-psyche-of-the-power-elites-is-essential>
- United Nations Development Program (2013). *Human Development Reports*. Retrieved from: <http://hdr.undp.org/en/data>

- United Nations Development Program. (2012). *Somalia: Human development report 2012: Empowering youth for peace and development*. Nairobi: UNON Publishing Services
- United Nations Development Program. (2006). *Promoting ICTs for Human development in Asia: Realizing the millennium development goals*. New Delhi: Elsevier,
- UNHCR. (2012). *Refugees in the Horn of Africa: Somali displacement crisis*, Retrieved from: <http://data.unhcr.org/horn-of-africa/regional.php>
- And: www.coastalpractice.net/glossary/anticipatory%20scenario%20.htm
- van Dijk, J.A. (2005). *The deepening divide*. London: Sage,
- Wollenberg, E., Edmunds, D. & Buck, L. (2000). Using scenarios to make decisions about the future: Anticipatory learning for the adaptive co-management of community forests. *Landscape and urban planning* 47(1-2), 65-77,
- World Bank. (2013). *Migration and Development Brief 20*. Retrieved from: <http://siteresources.worldbank.org/INTPROSPECTS/Resources/334934-1288990760745/MigrationDevelopmentBrief20.pdf>
- World Bank. (1994). Treaty Establishing the African Economic Community (Abuja 1991). Retrieved from: www4.worldbank.org/Afr.ssatp/Resources/HTML/legal_review/Annexes/Annexes%20
- World Trade Organization press release. (2010). Retrieved from: http://www.wto.org/English/news-e/pres10-e/pr598_e.htm
- World Economic Forum. (2013). *The Africa Competitiveness Report*,. New York: World Bank
- World Economic Forum. (2013). *The Africa competitiveness report*. New York, NY: World Bank.
- World Economic Forum, *The global competitiveness report, 2011-2012*, (Geneva: World Economic Forum, 2011).
- World Bank, *Migration and Development Brief 20*. (2013). Retrieved from: <http://siteresources.worldbank.org/INTPROSPECTS/Resources/334934-1288990760745/MigrationDevelopmentBrief20.pdf>;
- Yonazi, E., Kelly, T., Halewood, N. & Blackman, C. (2012). eTransform Africa: The transformational use of ICTs in Africa. Retrieved from: eTransformAfrica.org

Appendix

Table 1

Current status of African Regional Economic Communities

Regional Economic Community	Member Countries	Free Trade Area	Customs Union	Common Market	Economic & monetary union
COMESA	19	Established in 2000 with 14 participating countries	Launched in 2009 with a three year transition period	Not scheduled	Proposed for 2018
EAC	5	Established	Established	Agreement ratified in 2010; five-year transition	Scheduled for 2014
ECOWAS	15	Established	Not yet established	Initial steps taken re freedom of movement	Eventual merger of UEMOA and WAMZ envisaged
SADC	15	Established	due to be launched in 2010 but was postponed	Proposed for 2015	Proposed for 2016
IGAD	8	Not yet established	Not yet established	Not scheduled	Not scheduled

Source: United Nations Economic Commission for Africa, 2012

Footnotes

1. Sarah Parkinson, *Tele-centers, access and development: Experience and lessons from Uganda and South Africa*. Ottawa: ITDG Publishing, 2005; Hilda Munyua, "Application of ICTs in Africa's agricultural sector: A gender perspective," pp. 85-124 in Eva M. Rathgeber and Edith O. Adera, (eds.) *Gender and the information revolution in Africa*. Ottawa: IDRC Books, 2000; Rachel Solange Mienje Momo, "Expanding women's access to ICTs in Africa," pp. 169-186 in Rathgeber and Adera, (eds.). *Gender and information revolution in Africa*.
2. Klaus Schwab (ed.), *The Global Competitiveness Report 2013-2014*. Geneva: World Economic Forum, 2013.
3. Aida Opoku-Mensah, "ICTs as tools of democratization—African women speak out," pp. 187-203 in Eva M. Rathgeber and Edith O. Adera, (eds.) *Gender and the information revolution in Africa*. Ottawa: IDRC Books, 2000;
4. James Ogilvy, *Facing the fold: Essays on scenario planning*. London: Triarchy Press, 2012; Eva Wollenberg, David Edmunds, Louise Buck, "Using scenarios to make decisions about the future: Anticipatory learning for the adaptive co-management of community forests," *Landscape and urban planning* 47(1-2), pp. 65-77, 2000; Michel Godet, "The art of scenarios and strategic planning: Tools and pitfalls," *Technological forecasting and social change*, 65, 3-22, 2000.
5. World Economic Forum, *The Africa Competitiveness Report, 2013*. (New York: World Bank: 2013).
6. Fund For Peace, *Failed state index: 2013 rankings*. Washington, DC.: Fund for Peace. Also available at <http://ffp.statesindex.org/>
7. UNDP, *Human Development Reports 2013*. available at <http://hdr.undp.org/en/data>
8. UNHCR, *Refugees in the Horn of Africa: Somali displacement crisis*, (2012) Available at <http://data.unhcr.org/horn-of-africa/regional.php>
9. Available at: www.coastalpractice.net/glossary/anticipatory%20scenario%20.htm
10. James Ogilvy, *Facing the fold: Essays on scenario planning*. London: Triarchy Press, 2012; Michel Godet, "The art of scenarios and strategic planning: Tools and pitfalls," *Technological forecasting and social change*, 65, 3-22, 2000.
11. United Nations Development Program, *Promoting ICTs for Human development in Asia: Realizing the millennium development goals*, New Delhi: Elsevier, 2006.
12. P. Norris, "The digital divide: Civic engagement, information poverty and the internet worldwide," pp. 31-43 in P. Howard, and S. Jones (eds.), *Society online*. Thousand Oaks, Ca.: Sage.
13. Rachel Solange Mienje Momo, "Expanding women's access to ICTs in Africa," pp. 169-186 in Rathgeber and Adera, (eds.). *Gender and information revolution in Africa*.
14. United Nations Development Program, *Promoting ICTs for Human development in Asia-2006*; World Economic Forum, *The Africa Competitiveness Report, 2013*. New York: World Bank: 2013.
15. UNDP, *Human Development Reports 2013*, available at <http://hdr.undp.org/en/data>
16. Mary McCarty, "Schoolgirl from Pakistan teaches the world a lesson," *Dayton Daily News*, Oct. 28, 2012, Life & Arts Section, p. D4.
17. Ashraf M. Nur, "Warbixin: Tirada suxufiyiinta lagu dilay Soomaliya iyo magacyadooda." Available at <http://www.ishabaydhaba.com/?p=29747> Oct. 25, 2012
18. United Nations Development Program, *Promoting ICTs for Human development in Asia: Realizing the millennium development goals*, New Delhi: Elsevier, 2006).
19. E. Hargittai and A. Hinnant, "Digital inequality: Differences in young adults use of the Internet," *Communication Research*. 35, 2008, pp. 602-621.
20. Enock Yonazi, Tim Kelly, Naomi Halewood, and Colin Blackman, "eTransform Africa: The transformational use of ICTs in Africa." *eTransformAfrica.org* 2012.
21. Hargittai and Hinnant, "Digital inequality."

22. Karen Mossberger, Caroline J. Tolbert, and Ramona S. McNeal, *Digital citizenship: The internet, society, and participation*. Cambridge, MA.: MIT Press, 2007; J.A. van Dijk, *The deepening divide*. London: Sage, 2005.
23. Enock Yonazi, Tim Kelly, Naomi Halewood, and Colin Blackman, "eTransform Africa: The transformational use of ICTs in Africa." *eTransformAfrica.org* 2012.
24. World Trade Organization press release (2010), Available at http://www.wto.org/English/news-e/pres10-e/pr598_e.htm
25. Treaty Establishing the African Economic Community (Abuja 1991). Available at www4.worldbank.org/Afr.ssatp/Resources/HTML/legal_review/Annexes/Annexes%20
26. Qat is a herbal stimulant that is chewed for recreational purposes throughout Somalia. It is imported from Kenya and Ethiopia and costs the Somali economy an estimated \$1 billion annually. See *News from Somalia*, "How qat destroys the Somali economy and threatens her security," Available at <http://newsfromsomalia.wordpress.com/2013/01/08/warboxin-qaadka-oo-caqabad-ku-ah-dhaqaalaha-iyo-nabadda-soomaaliya/>
27. Neil Carrier and Emma Lochery, "More than little Mogadishu," *Focus on the Horn* July 25, 2012, Available at: <http://focusonthehorn.wordpress.com/2012/07/25/more-than-little-mogadishu/>
28. Abdilatif Dahir, "The nomad's way of doing business: A guide to Somali commerce," *Africa Review*, October 11, 2010.
29. Abdinasir Mohamed and Sarah Childress, "Telecom firms thrive in Somalia despite war, shattered economy," *Wall Street Journal*, May 11, 2010.
30. Will Mutua, "Investing in the telecoms, mobile, and broadband markets in Somalia," *Afrinnovator*, May 31, 2013; Available at <http://afrinnovator.com>
31. Abdinasir Mohamed and Sarah Childress, "Telecom firms thrive in Somalia despite war, shattered economy," *Wall Street Journal*, May 11, 2010.
32. "Somalia's civil war hides steady growth of Internet services," Issue No. 345 [Http://www.balancingact-africa.com/news/en/issue-no-345/top-story/somalia-s-civil-war/en](http://www.balancingact-africa.com/news/en/issue-no-345/top-story/somalia-s-civil-war/en) Accessed Aug. 1, 2013
33. David Souter, Lisham Adam, Abiodun Jaguna, and Tusu Tsubira, "ICTs for regional trade and integration in Africa," *eTransformAfrica.org* (2012).
34. Mahmoud Mohamed, "Internet accessibility growing steadily in Somalia," available at http://www.hiiraan.com/news4/2012/Oct/26384/internet_accessibility_growing_steadily_in_Somalia.aspx Accessed Aug. 1, 2013
35. World Bank, *Migration and Development Brief 20*. (April, 19, 2013). Available at: <http://siteresources.worldbank.org/INTPROSPECTS/Resources/334934-1288990760745/MigrationDevelopmentBrief20.pdf>; R. B. Lucas, "Migration and economic development in Africa: A review of evidence." *Journal of African Economics*, 15(2) pp. 337-395, 2006; Gabe Joselow, "Somali diaspora drawn back to Mogadishu," *How We Made it in Africa*. 28 Oct. 2013, Also available at: <http://www.howwemadeitinafrica.com/somali-diaspora-drawn-back-to-mogadishu/31757/>; Chris Manning, "Brain drain and brain gain: A survey of issues, outcomes, and policies, in the least developed countries," *UNCTAD Least Developed Countries Report 2007, Background Paper #6*. Geneva: United Nations Press, 2008.
36. Raynel M. Shepard, *Cultural adaptation of Somali refugee youth*. El Paso, TX.: Lfb scholarly Publishing, LLC. 2008; Abdi Kusow and Stephanie R. Bork, *From Mogadishu to Dixon*. Trenton, N.J.: Red Sea Press, 2007
37. United Nations Development Program, *Somalia: Human development report 2012: Empowering youth for peace and development*. (Nairobi: UNON Publishing Services, 2012).
38. Mike Pflanz, "Reverse brain drain: 'African lion' economies vs. West's fast track," *Christian Science Monitor*, October 21, 2012, Sec. N, p.1.
39. World Bank, *Migration and Development Brief 20*. (April, 19, 2013). Available at: <http://siteresources.worldbank.org/INTPROSPECTS/Resources/334934-1288990760745/MigrationDevelopmentBrief20.pdf>

40. Quoted in, "Somali diaspora's remittances cast a lifeline." *Africa Renewal*, May 2013, p. 8
41. Mary Harper, "The Somali millionaire 'thanked' for being rich," 19 May 2012, Available at <http://www.bbc.com/news/magazine-18117255>
42. Kenya and Uganda are members of WTO. Ethiopia, Sudan and South Sudan have observer status and are negotiating admission as full members. Somalia, Djibouti and Eritrea are not members.
43. World Economic Forum, *The global competitiveness report, 2011-2012*, (Geneva: World Economic Forum, 2011).
44. Enock Yonazi, Tim Kelly, Naomi Halewood, and Colin Blackman, "eTransform Africa: The transformational use of ICTs in Africa." *eTransformAfrica.org* 2012.
45. Gebru Tareke, "The Ethiopia-Somali war of 1977 revisited," *International Journal of African Historical Studies*, Vol. 33, No. 3. Pp. 635-667, 2000.
46. Tariku Debrtsion, "To solve the Ethiopian Eritrean conflict, a change in the psyche of the power elites is essential," Available at <http://www.asmarino.com/articles/1751--to-solve-the-ethiopian-eritrean-conflict-a-change-in-the-psyche-of-the-power-elites-is-essential> (May 16, 2013).
47. See discussion of the Greater Horn Horizons Forum in Ali N. Mohamed, "Radio and the propagation of pro- and anti-Ethiopian narratives in Somalia." pp.143-169 in Kidane Mengisteab and Redie Bereketeab (eds.), *Regional Integration, identity and citizenship in the Greater Horn of Africa*. London: James Currey, 2012.