

Digital Development  
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Uganda chapter

## **Digital Development: Governance, Information Technology and the State in East Africa**

Uganda

## **Introduction**

Before the advent of the ICT policy process in Uganda, ICT was fragmented, and split between at least three ministries. Communication was handled by the Ministry of Works, Transport and Communications; Technology was handled by the Ministry of Finance; and Information was handled by the Office of the President. These three distinct but overlapping strands were woven together on July 1, 2006 in the Ministry of Information and Communications Technology.<sup>i</sup> His office is located in a modern high-rise building built of concrete and glass rising over downtown Kampala. When I entered the Ministry for an interview in February 2007, I was struck by the air of efficiency pervading the premises. The building secretary greeted me as I walked in, and ensured that I was whisked from appointment to appointment, each of which started exactly at the scheduled time. Minister Mulira wore a bespoke, dark blue pinstriped suit; he rose to an imposing height of six foot three and warmly shook my hand. Our conversation began a punctual five minutes after the appointed time, and lasted for over an hour. Minister Mulira spoke in detail about the country's relationship with the United Nations and the World Bank, President Yoweri Museveni's goals for ICT in the nation, as well as policy issues surrounding getting ICTs to the rural areas of the country, and the technological obstacles relating to those goals. Minister Mulira's thoughtful, intellectual presence was a promising indicator about the quality of contemporary Ugandan governance, and the prospects for the nation's technological future.

## **Measuring Success in ICT Policy**

ICT is a thing of value with qualities of a public good.<sup>ii</sup> As an output of policy that is readily visible, ICT can be used in both an instrumental and attestive fashion<sup>iii</sup> in conjunction with other policy outputs to help strengthen and even build political coalitions. I argue that Museveni has used ICT as one tool to demonstrate his government's commitment to development.

In order to examine governance, I also carefully studied the policymaking process in four East African countries. The manner in which each ICT policy was developed, and the social organizations that participated in policy creation provides a window into the concentration of power in society and the extent to which each society is run by a small group of elites or by a larger group of citizens.

## **Implementing ICT Policy in Uganda**

In order to demonstrate Ugandan President Yoweri Museveni's commitment to development, the Ugandan government has distributed ICT artifacts broadly throughout the countryside. In terms of ICT governance, Uganda is a case of high implementation and low process. Uganda scores

high on the distribution of ICTs and the scope of implementation. In terms of speed of passage, Uganda passed its ICT policy in 2003 and its Rural Communications Development Policy even earlier in 2002. Civil society and the private sector exist in Uganda: they are stronger than in Rwanda, but weaker than in Kenya. The ICT policy process in Uganda was consultative: Civil society and the private sector had a voice in policymaking, but in a controlled, corporatist manner. There was significantly more input into ICT policy from civil society in Uganda than in Rwanda. However, that input was more controlled by the national government and less independent and spontaneous than that in Tanzania and Kenya. Donors were heavily involved in the Ugandan ICT policy process, and remain closely involved in both the ICT policymaking process as well as in funding and overseeing implementation.

Uganda has done a more comprehensive job of implementing ICT policies than its more peaceful neighbors, Kenya and Tanzania in part because the government of Uganda is under pressure to demonstrate its commitment to development in order to stay in power. Whereas Kagame faces a country split in two, Museveni faces a country divided into seventy-five linguistic groups, with four main, and often hostile, over-arching categories of ethno-linguistic division. The incumbent government in Uganda must demonstrate its legitimacy to constituents who have lived through recent and extreme sectarian violence which has combined historical, structural, and ethnic factors in complex combinations. Specifically, Uganda has experienced complete state and economic collapse, and the threat of its recurrence is all too real, given regional conflicts in the Sudan and Congo, and the recent civil war in the country's North. Uganda has seen the collapse of the state and the near disintegration of the government, regime and state authority within the memory of the last generation.

### **Uganda's History of Violence and Civil War**

Uganda under Museveni has successfully resisted civil war and state failure by building a viable political coalition.<sup>iv</sup> Regime stability in Uganda requires the composition of delicate ethnic coalitions. Museveni has created a "broad coalition based on ethnic power distribution (*cite?*)."<sup>v</sup> Museveni may be an autocrat, but given Uganda's potentially politically unstable nature, he must nonetheless consider how the policies he chooses will be received by those groups in the society that pose a credible threat of unrest (Stasavage 2005).<sup>v</sup>

Uganda has a rich and varied ethno-linguistic makeup. Uganda records at least seventy-five distinct ethnic groups and at least forty-three surviving languages. Uganda has one of the most diverse ethnic compositions of any nation on the globe.<sup>vi</sup> There are at least thirteen major ethnic groups in Uganda, yet none can claim even twenty percent of the population. The Baganda are the largest ethnic group in Uganda, yet make up only 17% percent of the population. The Bayankole comprise 9.5 %, the Basoga 8.4%, the Bakiga, 6.9%, the Iteso, 6.4%, the Langi 6.1%

and the Acholi approximately 5%. Many of Uganda's ethnic groups can claim only 2% of the population. Of Uganda's lot at Independence Phares Mutibwa remarks:

There were [...] grave problems of ethnicity and of disparity of development in the different regions of the country. When it came to nation building, Tanzania and Kenya, Uganda's sister-nations in East Africa were luckier than Uganda in many ways.

Uganda's problem was made all the more complicated by the fact that the independence constitution favored one ethnic group (the Baganda) over the others.<sup>vii</sup> As eloquently noted by John Saul observing the situation under Amin:

Uganda is uniquely ill-favored in this respect. The tribes are not small enough to allow a Tanzanian situation where no one tribe or group can effectively dominate as an alliance. On the other hand, the tribes are neither few nor large and cohesive enough to provide an uneasy balance of power, such as appears to exist in Kenya under the shadow of President Kenyatta. . . The suspicion and hostility engendered by this sort of attitude was hardly a sound basis for national unity.<sup>viii</sup>

As a result of this complex composition, Uganda has struggled with internecine violence throughout its post-Independence history. At independence, Uganda was experiencing good economic performance, with an annual real GNP growth rate of 6%. The country experienced a non-violent transition to independence. Soon after independence in 1966, Apolo Milton Obote, the Prime Minister of Uganda arrested five of his cabinet ministers and suspended the 1962 constitution and made himself Head of both State and Government (Uzoigwe 1983).<sup>ix</sup> Obote abolished the extant Ugandan kingdoms, brutally attacking the largest group the Buganda in 1966. Obote ruled with the support of his own party, an unstable and shifting alliance of Acholi, Nilotic and Langi supporters and the army (Saul 1976).<sup>x</sup> Obote utilized the method of divide and rule, resulting in a high level of tribal tension throughout the country. He encouraged divisions among Muslims, discrimination against Catholics, and a buttressing of Protestants. Development in this period was sharply uneven; competition was cast in tribal and religious categories. Corruption, jostling for offices and jobs, jockeying for power, and tribal patronage were the order of the day. Obote's power base grew increasingly narrow.<sup>xi</sup>

In 1971, General Idi Amin, a high-ranking military officer from the North, seized power in a *coup d'état*. However, Amin scarcely attempted to foster a political or ethnic base broad enough to allow for consensual rule, which led him to rely on a narrow constituency and use brutal force to ensure compliance and to stay in power (Flanary and Watt 1999).<sup>xii</sup> Indeed, his term began with the alienation of the Acholi and Langi, and he systematically purged Acholi officers and soldiers. Amin closed borders with neighboring Rwanda and Tanzania, isolating the country from its East African Community partner states. Amin suspended all political activity and civil rights, dissolved the National Assembly and expelled most Ugandans of Indian descent. Parliamentary activity came to an end (Short 1971).<sup>xiii</sup> The government—if indeed the group of soldiers and mercenaries that controlled the state can be called that—employed widespread and capricious

use of force. Amin was overthrown in a violent coup in 1979. Under his rule, the GDP declined 20 percent and the country was reduced to “howling anarchy.”<sup>xiv</sup>

A series of short lived, extremely weak governments followed. The first was led by Yusuf Luke, a Muganda, whose government functioned with no constitution. His ouster was followed by a wave of violent protests, culminating in the succession of Godfrey Binaisa, also a Muganda who championed free speech, an open press and human rights. Nonetheless, Binaisa was unable to resurrect Parliament or a functional constitution, and the army removed him from power in 1980. The country was ruled by a six member Military Commission for nearly a year. On May 27, 1980, Obote returned to the country with the assistance of the Uganda National Liberation Army, and various new parties sprang up. Obote won elections that year based on massive rigging and irregularities. Many opposition members fled the country fearing for their life. Violent attacks on opponents were commonplace. The government reverted to a state which lacked both political authority and representativeness.

After a protracted armed struggle, the National Resistance Army came to power in Uganda, promising dramatic change in Uganda’s political life. Two generals, Okello and Lutwa, briefly took power, but Museveni’s army took control of Kampala before negotiations ended. Upon assuming power in 1986, Museveni’s National Resistance Army faced the daunting task of establishing the control of the national government across the country. In order to establish what he called “no-party” democracy, Museveni had to co-opt people from diverse and even opposing groups, religions, languages and parts of the country. Yoweri Museveni, a member of the Ankole ethnic group who hails from a peasant family in the Western part of the country<sup>xv</sup> explicitly promised an end to religious sectarianism and tribal divisions upon taking power (Ward 2001).<sup>xvi</sup> According to Museveni’s movement ideology, the risk of political parties in Africa is that they will invariably degenerate into ethnic or religious factions, as indeed appears to be the case in neighboring Kenya, and was true in Rwanda before the genocide. The movement system, accordingly aimed to include all of Uganda’s main ethnic and religious groups in an organization based on national unity, perhaps in imitation of the Tanzanian model. Museveni has been quite successful at fulfilling his promises of a return to peace and security, change in constitutional life, and an end to tribalism in most parts of the country.

Nonetheless, civil strife has continued in Uganda since 1986. The Acholi of Northern Uganda have felt excluded from the benefits of Museveni’s rule (Ward 2001).<sup>xvii</sup> Joseph Kony’s Lord’s Resistance Army has been destabilizing northern Uganda since 1987, forcing children to become soldiers, or worse, displacing hundreds of thousands, and dramatically disrupting the economy of at least 9 of Uganda’s 80 districts (Dunn 2004).<sup>xviii</sup> In reaction, the Ugandan People’s Defense Force has concentrated much of the populations of Gulu and Kitgum districts into protected villages.

Museveni's government began its rule of Uganda as a military dictatorship with its own share of anti-democratic actions and human rights abuses (Omara-Ottunu 1991).<sup>xix</sup> Museveni has ruled for twenty years. Museveni began his political career as a military dictator, but has evolved into a statesman who has introduced increasingly competitive elections. Unlike Amin, Museveni is far more than a violent brute. Unlike Obote, he understands that the State of Uganda is a fragile one that can only be tethered together by a government which is seen as legitimate and provides representation to most of the groups in the country, not a myopic divide and rule strategy.

Museveni is not without his critics, however. In recent years, particularly since 2006, scholars have noted that elements of "authoritarianism, arbitrariness, corruption and other manifestations of patronage politics" characterize Ugandan governance. (Mwenda and Tangri, 2005). Unfortunately, he has an uncomfortable attitude about the rule of law. The Sixth Parliament's Select Committee on Privatisation issued a report in 1998 highly damaging to Museveni's family indicating that Museveni's family members were personally benefiting from donor privatization projects. In particular, Museveni's brother, Salim Saleh was singled out for potential criminal investigation with regard to the privatization of the Uganda Commercial Bank, and Parliament actually temporarily suspended the government's program of divesting state-owned enterprises (Tangri and Mwenda, 2006). In addition, Museveni forced through a 2005 amendment to the Constitution to allow him to run for the presidency of for a third term (Uganda, 2005). Most damaging to Museveni, civil strife has continued in Uganda since 1986. Joseph Kony's Lord's Resistance Army has been destabilizing northern Uganda since 1987, forcing children to become soldiers, or worse, displacing hundreds of thousands, and dramatically disrupting the economy of at least 9 of Uganda's 80 districts (Dunn 2004).<sup>xx</sup> In reaction, the Ugandan People's Defense Force has concentrated much of the populations of Gulu and Kitgum districts into protected villages. Part of the impetus for this conflict, which is finally winding down, is that the Acholi of Northern Uganda have felt excluded from the benefits of Museveni's rule (Ward 2001).<sup>xxi</sup>

As Museveni has maintained his grip on power using methods with authoritarian overtones, he has attempted to legitimize his government through competitive national elections. Museveni won the 1996 election with 75 percent of the vote, the 2001 election with 69 percent of the vote and the 2006 election with 59 percent of the vote. Opposition leader Kizza Besigye garnered 28 percent of the vote in 2001 and 37 percent of the vote in 2006.<sup>xxii</sup> Museveni's share of the vote is declining, the percentage of the opposition leader's vote is increasing, and more parties are participating in national elections. Clearly, elections in Uganda are becoming more competitive, although they fail to rise to the level of multi-party democracy.

Museveni faces two pressure points which threaten his ability to stay in power. First, Museveni faces an increasingly competitive electoral environment. Second, although his government has been able to maintain peace, it is a fragile peace, and is continuously under threat from the conflict in the North, as well as instability in the Congo. As a matter of political survival,

whether via military *coup d'état* or electoral removal, Museveni must demonstrate the effectiveness of his government to the Ugandan people. Information and communications technology is one effective way of doing just that.

### *Envisioning ICT*

According to former ICT Minister Ham Mulira, if Uganda is to move into the next millennium, the country needs economic growth, and ICT can help promote growth. He also stated that ICT can assist the government to deliver services more effectively; ICT can help ensure rural people access to markets, because as Museveni's advisor for ICT, Khalissa Ibrahim, pointed out, "people in the village do not have the basic means of communication."<sup>xxiii</sup> The competitive advantage of Uganda in the EAC region is education and agriculture. At least 80 percent of the country has arable land, a much higher percentage than its neighbor Kenya. According to staff at the Ugandan Communications Commission, ICT can enhance the ability of farmers to market their goods in the region and for export to Europe. The prestige of storied Makerere University allows Uganda to build on its international reputation as a country with a strong educational system.<sup>xxiv</sup> Uganda can use ICT to enhance its competitive advantage in education at the primary, secondary and university levels, in part by helping teaching institutions increase their access to educational materials. The Ugandan government looks to ICT to improve governance and to improve economic growth.

This role which ICT plays in garnering rural political support was described by an executive from the Ugandan Telecommunications Limited Company.

"The ideology of the NRM is that you have to serve rural people. Most of the rural people vote in one block. To keep that block, they have to roll out services. If the roads are not tarmacked, they should at least be well graded. During the elections NRM made speeches. They said we brought you better telephone services. We improved your schools, your health clinics and your telephone. They will say, we brought your telephone here. You used to have to go to town to make a call. Now you can go to your farm, and call, and ask the price of maize flour at Owino Market."<sup>xxv</sup>

## **Measuring Distribution and the Scope of Implementation in Uganda**

Uganda has done an impressive job of connecting rural citizens in all parts of the country to ICTs. Uganda has the broadest scope of implementation of ICTs of all the countries under study. Uganda's government has distributed publicly funded ICTs broadly geographically. The Ugandan government has placed ICTs in hospitals, schools, post offices, Internet cafes and telecenters. The accomplishments of the Ugandan government with regard to ICT are particularly impressive given the fact that the country, although one third the size of Kenya and one quarter

the size of Tanzania, is many times larger than Rwanda, and the second poorest nation in the East African Community. The size of the country is relevant, when one is discussing distributing ICT infrastructure, because distributing that infrastructure means reaching into the most remote rural areas, which is more difficult in an area with difficult terrain, or a large territory.

One lesson of the failed Amin and Obote administrations is that force alone is insufficient to rule Uganda. Accordingly the Ugandan government has to make a convincing show of distributing desired goods and services throughout the country to stay in power. For example, Uganda's establishment of free primary education is a dramatic example of an African government increasing spending on basic service provision as part of an effort to maintain political legitimacy (Stasavage 2005).<sup>xxvi</sup> A leader such as Museveni can use ICTs to support his efforts to provide basic services like health and education. ICTs are visible and tangible: they can be seen in schools, hospitals and universities; as such, ICTs have demonstrative and attestive value. They buttress already popular social justice goals of improved education and improved healthcare. They are popular with donors, and they are "modern." Much like roads and electricity, facilities such as schools, hospitals and tele-centers are a tangible, visible symbol of government effort which Museveni can point to in an attempt to demonstrate the contributions his government has made throughout the country. Museveni's Uganda asks for citizens to legitimate the state's technological actions. "The state must continually construct demonstrations—in war and in peace—to persuade citizens that it is acting for their collective benefit." (Jasanoff 2004: 33)<sup>xxvii</sup>

As previously noted, Uganda has the broadest scope of implementation in the East African Community, and has made a concerted effort to distribute ICTs throughout the country. Uganda has actually outstripped Rwanda in tele-centers, and has also built infrastructure to support these projects in the form of Internet Points of Presence. This has allowed the government to build Internet Cafes, ICT Training Centers, and place payphones in rural areas. The Internet points of presence provide Internet coverage over a radius of ten kilometers and operate with wireless technology. The function of training centers is to train rural residents to acquire skills in the use of standard computing platforms, such as Microsoft Word or Linux Open Source. Training centers also help train villagers how to start a small scale village business, such as a vegetable processing business, with the aid of ICT. Further, the Ugandan Communications Commission is working with each of the eighty districts to create district websites, and is training people in each district to develop locally relevant content in local languages, and maintain the websites. The payphones, or Community Information Centers, serve a widely distributed setting of up to 15 kilometers.

The Internet Cafes, training centers and tele-centers are operated on the basis of a public-private partnership. The buildings are rented, and the government partnership provides the computers, but ownership and management of the Internet cafes is the responsibility of a private owner. Internet access is provided at low cost to make it affordable to the average citizen. Uganda has



made it a legal mandate that telecommunication companies have to build out infrastructure in rural areas. This has allowed the UCC to use the RCDF to bid for advanced telecommunications services in rural areas, which are then provided by private sector companies. For example, MTN and Uganda Telecommunications Limited have been contracted to build out Ugandan pay phones and Internet points of presence.

**Table 1: Ugandan Efforts to Place ICTs in Public Access Points**

	<b>Primary Schools w. PCs and printers</b>	<b>Secondary Schools w. PCs and printers</b>	<b>Vocational Institutes w. PCs printers and Internet</b>	<b>Tele-centers</b>	<b>Hospitals</b>	<b>Post Offices w. ICT facilities</b>	<b>ICT Training Centers</b>	<b>Payphones</b>	<b>Internet Cafes</b>	<b>Internet PoPs</b>
<b>2007</b>	61	126	41	13	21	33	55	316	55	52
<b>2008</b>	61	126 plus 103 have Internet	41	13	21	48	70	2249	55	70
<b>2010</b>	61	142	41	13	43	45	80	2422	71	74

## **Ugandan Efforts to Place ICTs in Public Access Points**

As a result of these ambitious efforts, ICT hardware and software has been broadly deployed in Ugandan hospitals and schools. By 2007, at least 61 primary schools throughout the country had received ICT facilities from the government, including PCs and printers. An additional 126 secondary schools in Uganda received ICT facilities from the government, including PCs and printers.<sup>xxviii</sup> Further, an additional 98 secondary schools have received Internet connectivity through a public private partnership between the Government of Uganda and Uconnect. By 2007, five rural high schools had received an Internet connection from the Ugandan government and 41 vocational institutes had computers, printers, and some Internet access. By 2008, 106 School ICT labs had been put in place at the district level, 100 school ICT labs were extended to the county level by 2009, and by 2010, 300 school ICT labs were present at the constituency level.<sup>xxix</sup> At least 21 government hospitals have received ICT facilities from the government.<sup>xxx</sup>

Uganda used its Rural Communications Development Fund to construct at least 55 ICT training centers throughout the country, with the assistance of World Bank financing, by January of 2007. Using its RCDF, Uganda had installed 316 public payphones. The Ugandan government also installed 52 Internet points of presence, which are important for providing Internet service in more rural areas.<sup>xxxi</sup> By 2007, the Ugandan government had already built 55 ICT training centers, an additional 55 Internet cafes, 33 postal centers with ICT facilities, and 13 tele-centers. Most of these projects have been funded by a 1% service levy on telecommunications operators, in addition to World Bank funding. By 2008, those numbers had increased to 70 Internet Points of Presence, with a stated goal to have one Internet Point of Presence in each of the 80 districts. In addition, the Ugandan government has constructed 55 Internet Cafes, 70 ICT Training Centers, over 2000 public pay phones, and 15 additional postal support projects.

With the assistance of the Chinese government, Uganda is also building fiber optic cable which can transmit Internet connectivity and possibly electricity in each secondary town throughout the country. Twelve towns have already received fiber, and an additional fourteen towns are scheduled to receive fiber by the end of the decade. In addition, the government aims to connect every district headquarter office in the government by the end of the decade. Very few government departments in the capital have local area networks inside of the agency. Agencies within Kampala are not well connected to each other. As a result, the capital is connected to the rural areas, but agencies are not well connected to each other internally. As was the case in Rwanda, this is a sign of an artifacts based approach to ICT, not a technological systems approach.

## **Funding Distribution: Uganda's Rural Communications Development Fund**

Traditionally, IT, or information technology, was considered to be different and separate from telecommunications. In the 1990s, in Uganda as in the rest of the world, telecommunications and IT began to converge. As a result, companies that previously could only provide telephony were able to provide Internet, Voice over Internet Protocol, and build infrastructure. In exactly the

same process that occurred in Kenya and Tanzania, the Uganda Communications Act of 1997 unbundled the postal service, the banking service, and the monopoly telecommunications agency and created the regulator, the Ugandan Communications Commission. The World Bank was the driving force behind liberalization in all these countries, but whereas some countries were saddled with conditionalities, Uganda received incentives, including increases in the size of grants and loans.<sup>xxxii,2</sup>(Bowman, 2007c) The telecommunications agency was privatized (becoming UTL), with the Ugandan government retaining 49% strategic stake and 51% being sold to a strategic investor from a South African consortium. A second national operator, MTN, was licensed immediately. The third operator, Celtel, came in soon after. The Ugandan parliament explicitly wanted to encourage investment and also aimed for full liberalization. As a result, Uganda entered its ICT policymaking period with one of the most competitive telecommunications sectors in the region.

In Uganda, there is an ICT policy document which is more important than the ICT policy itself. The mandate for the Rural Communications Development Plan was in the 1997 Communications Act, under the auspices of the Ugandan Communications Commission. The country had just emerged from a continent-wide period of liberalization, and, according to his advisors, President Museveni was concerned that the rural areas would be left out. The policy aimed to determine how best to serve those areas. The Uganda Communications Act of 1977 required the UCC to establish a Rural Communications Development Fund which was to “increase the geographical distribution and coverage of services throughout the country. The Rural Communications Development Policy was commissioned in 2001 and completed in July, 2001, when it was approved by the Minister of Works, Housing and Communications. The inception report for the Ugandan ICT policy began in 2002.

The Uganda Communications Commission administers a universal service fund for communications in accordance with the provisions of the Communications Act.<sup>xxxiii</sup> The fund is called the Rural Communications Development Fund, and was officially launched in 2003. Several donors have helped to fund the RCDF including, the Swedish and the World Bank. The goal of the fund is to promote ICT usage in Uganda, particularly in rural areas, and to ensure the availability of basic communications services to Ugandan citizens within a reasonable distance. The funding mechanism for the RCDF is a 1% levy of gross revenues of all providers in telecommunications in the country. By 2007, the country had received about 8.4 million dollars from the World Bank, which comprised about 50% of the RCDF’s operating budget. According to top Ugandan governmental officials, the World Bank has supported the Ugandan government’s efforts to pursue E-government reforms, implement the RCDF and pursue its ICT policy because of the World Bank’s belief that an improvement in ICT usage could enhance the government’s transparency and efficiency, as well as its economic and financial management.

Uganda is divided into 112 districts spread over four roughly equal major administrative regions: Central, Eastern, Northern and Western. The developers of the RCDP determined that 154 sub-counties out of a total of 920 sub-counties were “unviable” by main telecommunications operators. The initial target of the RCDP was to have one payphone for every 2500 people in these sub-counties. Uganda’s ICT efforts have a strong rural focus. Penetration of ICTs--using technologies such as GSM--to the rural areas or “upcountry” is scheduled in outward radiating circles. Even using the old ICT of telephony, every single government office at the district office already has a fixed line telephone. In addition, by 2010, the Rural Communications Development Fund had ensured that 506 Ugandan secondary schools have ICT labs.

As of October of 2008, the RCDF had been the main funding mechanism for tele-centers, ICT in post offices, public pay phones, Internet Points of Presents and other main efforts at increasing rural Internet access. Observers in civil society lauded the government’s success in building infrastructure. For example, one observer noted that “there has been a tremendous development in payphones in rural areas.” Yet criticisms remain.

Sustainability continues to be a challenge for ICT facilities. One approach which the Ugandan government has used is to diversify the services the centers provide to the community in an effort to ensure sustainability. Like Rwandan tele-centers, Ugandan tele-centers often provide secretarial services, faxing, typesetting, as well as telephony. In addition, Ugandan tele-centers have added repair and maintenance units for computers, and they also sell mobile phone airtime, computer accessories and stationary. One civil society leader noted his concern that institutions that have received grants from the RCDF have sometimes failed to deliver. In addition, another civil society participant expressed the concern that development of Internet cafes should focus on community needs.

“People just set up these centers and assume that people will use them. But there is a need for local content to make them relevant. . . .One of the biggest challenges why these things don’t work out are the technical glitches. A PC comes to Kampala for repair and never returns. There was no one on site who could repair it.”<sup>xxxiv</sup>

As is the case in Rwanda, Ugandan tele-centers in particular seem vulnerable to collapse due to both poor planning and the inability of local residents to actually maintain and repair equipment. One American-educated private sector respondent, who had returned to his native Uganda to work, told me a cautionary tale which echoed the concerns of the civil society respondent. A tele-center sponsored by Hewlett Packard Corporation was built at a school in Kamuli. The tele-center had twelve computers and Internet access. The Member of Parliament for the area decided to build a tele-center at a school twenty miles away from the nearest electrical generating station. A huge generator was donated from Sweden but it broke down, and no one knew which company had donated it, leaving the school without electricity. Hewlett Packard pulled out after

the launch. No one at the school had the training to repair the computers, which were not working in any event in the absence of electricity. The computers are still there, their circuits undoubtedly decomposing quickly in Uganda's legendary jungle heat.<sup>xxxv</sup> Dr. Baryamureba of Makerere noted that although most Ugandan secondary schools have connectivity, there is a problem with sustainability. He noted that many of NEPAD's e-schools were failing (Bowman, 2006a).

### **Legitimizing Authoritarianism: the ICT Policy Process in Uganda**

The development of the Ugandan ICT policy could be termed "top-down consultation." Civil society in Uganda, according to its members, has been active in ICT policy formulation. The Ugandan government calls upon civil society groups and requests their participation and input.<sup>xxxvi,xxxvii</sup> Although input by Ugandan civil society is vigorous, it is also highly coordinated. Indeed, the Ugandan constitutional process also provided for extensive involvement of the general public over an eight year process.<sup>xxxviii</sup> This approach resembles a consultative or corporatist process. Using the mechanism of "state-hierarchic" coordination, the Museveni government helps to gain legitimacy for its policymaking process from the private sector and civil society (Schmitter 1985).<sup>xxxix</sup>

There are approximately six ICT related civil society and private sector groups in Uganda and three major groups: CIPESA, WOUGnet, and I-Network. One of the most important ICT civil society groups in Uganda is WOUGnet, or the Women of Uganda Network.<sup>xl</sup> Founded in the mid 1990s, WOUGnet aims to "engender" the ICT policy process. The organization attempts to represent local communities, particularly rural people. The organization also is evaluating the Rural Communications Development Fund program in Uganda to evaluate its gender impact, and to determine whether women and men are benefiting equally from ICTs in rural areas. Importantly, WOUGnet focuses on raising awareness and building capacity around women who use ICT. They conduct significant amounts of training of citizens to use computers. WOUGnet is also conducting a policy assessment of the implementation of the Rural Communications Development Fund.

CIPESA's director says their organization focuses as a think tank which conducts research, prepares presentations, reports and briefings on ICT related issues. The organization collects and disseminates information in regional and national workshops. The organization also works on capacity development to train Ugandans how to use and maintain computer equipment. CIPESA also holds workshops to train policymakers about pressing ICT policy issues such as infrastructure, domain names and Internet governance, and intellectual property rights.<sup>xli</sup> I-Network is a trade association for the private sector in ICT in Uganda. The group holds roundtable workshops and topical seminars on issues such as the revision of the Telecommunications Act. It works with business owners and associates to develop the capacity

of the Ugandan private sector to work with ICTs. The organization also tries to disseminate lessons learned from pilot projects and from efforts on ICT for development.

The Ugandan government directed its ICT policy process through a unit called the National Planning Authority which established a national ICT working group. As was the case in Rwanda, the policy itself was drafted by consultants. Two consultants, Mr. Katiti, the e-government advisor to NEPAD, and Mr. Musambu, the Executive Director of the UCC drafted the policy.<sup>xlii</sup> One significant improvement over the Rwandan case from the standpoint of building local capacity was that one of the Ugandan consultants was a Ugandan with a major policymaking position. The Ugandan Communications Commission spoke to civil society, the government, and large telecommunications providers such as MTN and Celtel, as well as to Internet Service Providers. The UCC had individual meetings with the management of various private sector organizations, and requested comments on specific aspects of the policy. Organizations had time to prepare. The UCC compiled recommendations, which were then discussed at public gatherings. The UCC then compiled a revision.

The policy was presented to a national steering committee headed by Mr. Mugambi. This team of approximately 15 persons had representatives from civil society and private sector groups interested in ICTs such as WOUGnet, CIPESA, Kabissa and I-network. In addition, this organization had representation from a private sector association dedicated to ICT known as I-network, and from government entities such as the Ministry of Health, the Ministry of Defense, and the Ministry of Information. In contrast to the process in Rwanda, no donors participated on the Ugandan ICT task force. Civil society organizations and private sector organizations were encouraged to review the government's draft and give comments. After the group received guidelines from the ministry, the Uganda Communications Commission held workshops with civil society, the private sector, academia, and parliament. A consultation document was developed, and according to one private sector respondent, "the participatory consultation was extensive." Relationships between the government and civil society sectors appear to be cordial. According to one civil society leader,

"We have been called upon, participated and given input. The output is not ours. Almost everything [we] proposed was accepted. We got our words into the document."<sup>xliii, xliv</sup>

This civil society leader's comment that "the output is not ours," points to the fact that although civil society participates, it does not have significant muscle or leverage to change the final outcome of policy.

One significant failure in participation was that academia was not involved at all in formulating the policy other than giving their views at one of the public hearings. The internationally respected Makerere University in Kampala has a thriving Department of Computing. Three

public hearings were conducted in 2004 and 2005 which were open and advertised in the major Ugandan newspapers. The academics did attend these public hearings, but one prominent academic in the computing field noted that the comments from the national workshops were not necessarily incorporated. (Bowman, 2006a) The academic computing faculty of Makerere could have made a crucial contribution in the policymaking process. They are among the most educated of Ugandan citizens, and also have subject matter expertise in the relevant policy domain. In the absence of significant citizen input, academics could have raised important policy concerns during the policymaking process. One of the greatest advantages which Uganda has over its neighbor Rwanda is a dramatically higher level of capacity, due to a strong university system, and an educated and literate populace, which has had over twenty years of peacetime to develop its skills. The omission of the views of the regionally renowned Makerere faculty is a significant flaw in Uganda's participatory process.

Devra Moehler's research on constitution-making in Uganda indicates that political elites can strongly influence and guide political processes even when they have a participatory model. (Moehler, 2006) The policy process in Uganda was more consultative than the policy process in Rwanda. Using Sherry Arnstein's ladder of participation, the ICT policy process in Uganda allowed government selected citizens to hear and be heard, but those citizens lacked the power to ensure that their views would be considered. Thus, the ICT policy process in Uganda falls under the category of "informing and consultation": it was not truly participatory (Arnstein 1969; Fung 2004).<sup>xlv</sup>

### **ICT as an Element of Modernization and Modernity**

Why should ICT be a national development priority in a country like Uganda that is one of the poorer countries in Africa? After discussing the topic with numerous officials in all four countries, it was my impression that Ugandan officials had the best thought out and most nuanced response to this query. Museveni may be one of the most sophisticated of East African politicians at understanding the potential of ICTs. Museveni himself holds an explicitly modernist vision of the future, and sees himself as a teacher trained in both the natural and social sciences (Kassimir 1999).<sup>xlvi</sup> In an early assessment of Museveni's style, Michael Twaddle noted that the leader maintained a self-consciously scientific approach to the task of ruling. As an intellectual, Kassimir notes that the authority of science in conjunction with moral vision permeates the writings of Museveni.<sup>xlvii</sup> Museveni embraces the developmental, and modernization paradigms of his university education, which took place in the late 1960s and early 1970s. Museveni, argues Kassimir, believes that Uganda is behind in scientific and technological development, and that the peasantry must become "modern" in order to advance.<sup>xlviii</sup> He also favors methods that help the Ugandan peasantry to ensure the movement of their goods and services, to help them alleviate their own poverty.<sup>xlix</sup> If East African

governments believe the predictions of economists that ICTs can make markets work more efficiently and promote economic development and alleviate poverty, it comes as no surprise that Museveni would be attracted to a technology which seemingly reinforces his existing beliefs regarding development.

Political figures often utilize scientific and technological advances in an instrumental fashion, as a means of demonstrating their ability to improve the life of their constituents and their commitment to democratic progress.<sup>1</sup> Uganda provides one of the most compelling empirical examples of this point. The ICT projects built by the government, according to one Makerere Don, are “politically motivated.”<sup>li</sup> Science and technology can be used by the state to demonstrate its commitment to a “witnessing” public, one way to show that commitment is to build facilities that can be witnessed by citizens in different parts of the country.

“Some of these ICT centers are being set up just to set up. I am a politician. I want to show my communities that I am doing something, for them, so I build a tele-center.”

One function of building ICT facilities is to demonstrate directly to rural citizens themselves that the government is fulfilling its promises, by providing them with useful goods. For example, the ability to get prices for commodities over cellular phones means that farmers do not have to pay middlemen to market their goods, and can choose the most profitable market to sell in.

Although Museveni remains an autocrat, due to the highly fractured nature of Ugandan society, he cannot rule by force alone. He must maintain legitimacy in the eyes of his constituents and persuade them that a government under his direction is more desirable than another political alternative. One method of maintaining this legitimacy is through broad distribution of infrastructure in every corner of the country. The Ugandan Communications Commission has made a concerted effort to place its facilities in every district, even though there are 112 districts.(Bowman, 2010) According to Bob Lyazi, the director of Uganda’s innovative Rural Communication Development Fund, getting ICT infrastructure to every corner of the country is crucial.

If you leave out one district, you leave out several people. We tend to want to do it using professional motivation, not political motivation. But we get support from politicians because it is in line with them getting re-elected. So our interests are the same. It didn’t start with them as politicians, it started with equitable distribution. Along the way you meet stakeholders. You must get the stakeholders to guide the project, to own the project. And politicians are some of those stakeholders.<sup>lii</sup>(Bowman, 2010)

Lyazi notes that 80 percent of Uganda’s population is located in rural areas. As a result, the Ugandan government prioritizes rural development. Lyazi does not receive his marching orders



directly from the President, but an emphasis on rural development is evident both in the PEAP (what year) as well as the Ugandan Telecommunications Policy.

This role which ICT plays in garnering rural political support was echoed described somewhat more eloquently by an executive from the Ugandan Telecommunications Limited Company.

“The ideology of the NRM is that you have to serve rural people. Most of the rural people vote in one block. To keep that block, they have to roll out services. If the roads are not tarmacked, they should at least be well graded. During the elections NRM made speeches. They said we brought you better telephone services. We improved your schools, your health clinics and your telephone. They will say, we brought your telephone here. You used to have to go to town to make a call. Now you can go to your farm, and call, and ask the price of maize flour at Owino Market.”<sup>liii</sup>

Politicians cannot use ICT facilities to build or maintain a political coalition in isolation. Rather, they are one component of a basket of goods and services, including food aid, education, agricultural support, and medicine which have value which can be distributed by politicians to their constituents. One particularly attractive quality of ICTs, however, is that they can be used to support government aid in all these areas. ICTs have value partly because of their “modern” foreign quality, partly because they “enable” other desirable social goals, and partly because they are so visible.

## Conclusion

With regard to distribution, Rwanda has distributed more individual pieces of hardware to public primary and secondary schools than Uganda. However, Uganda easily outstrips Rwanda with regard to scope of implementation, placing ICTs in primary schools, secondary schools, universities, hospitals, tele-centers, community information centers, building out payphones and constructing ICT training centers. Both Rwanda and Uganda have performed similarly with regard to building up their infrastructure. From the standpoint of policy process, Uganda had participation by twelve civil society members, and a handful of private sector members in its policy process, as compared to one civil society representative and no private sector representation in the Rwandan process. In Rwanda, government officials themselves admitted that “stakeholders were not adequately engaged,” the private sector was non-existent in ICT development, and the Rwandan civil society representative complained that Rwandan civil society “had not been consulted enough in the NICI process.” Both private sector and civil society observers in Uganda noted that the relationship between Ugandan government and Ugandan civil society was “cordial” and that that the government had consulted the private sector on ICT policy “quite generally” since 1998. Nonetheless, the level of consultation in Uganda fell far below the levels seen in Kenya and Tanzania

Museveni is no ideologue; he is a pragmatist. He was quick to abandon his avowed Marxist beliefs, and became the darling of the development community in the late 1980s and early 1990s when he chose to work closely with the World Bank, enthusiastically implementing their austerity plans and embracing the neo-liberal approach of the Washington Consensus. These efforts in conjunction with a pro-business regulatory environment have created a stable climate for capital investment. Uganda has three national telecommunications operators, Celtel, MTN and Uganda Telecommunications Limited. Uganda also has five major information and telecommunications service providers with public infrastructure licenses, as well as twenty internet service providers. Telephone subscribers rose to over seven million up from two million from 2007 until 2009.

There is no question that Uganda has one of the most competitive telecommunications and ICT sectors in the Eastern African Community. This is of no small import. The Uganda Communications Commission is well funded, and raises its own funds. It receives spectrum fees from telecommunications operators; it gets license fees from MTN, UTL, Celtel and the various Internet Service providers.<sup>liv</sup> Although both Uganda and Rwanda have functioning Rural Communications Development Funds which are supported by 1% tariffs on telecommunications providers, Rwanda only has a handful of providers to tax, whereas Uganda's tax is spread over a far larger and more diverse sector. All of these entities must hand over the one percent levy to the UCC. Accordingly, this mechanism is likely to be more financially robust in Uganda than in Rwanda in the long run.

The political and the technological story of Uganda mirrors and reflects the story of Rwanda, for both are stories of strong structural forces in combination with strong agency. Structurally, Uganda is a poor country with few natural resources. In the period between 1979 and 1986, the Ugandan government came to a grinding halt. Anarchy and violence were the order of the day. The state had no legitimacy and no effectiveness. From an agency standpoint, Museveni has provided stable and effective leadership. Given the extreme linguistic fractionalization of the country, and given the country's history of regional violence, which continues to this day as civil war rages on in the North of Uganda,<sup>lv</sup> maintaining a ruling coalition in Uganda is a delicate matter of persuasion, balance and juggling. With the shrewd and broad distribution of a variety of attractive goods and services, including ICT, Museveni has succeeded—at least to a larger extent than his predecessors—in that task.

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<sup>i</sup> Pioneer ICT Minister Ham-Mukasa Mulira holds a doctorate in computer science from the University of London Dr. Mulira has now been assigned by President Museveni to be the Senior Presidential Advisor on ICT.

<sup>ii</sup> Mesquita's work discusses the qualities of public goods. MESQUITA, B. B. D., MORROW, J. D., SIVERSON, R. M. & SMITH, A. (1999) Policy Failure and Political Survival: The Contribution of Political Institutions. *The Journal of Conflict Resolution*, 43, 147-161.

<sup>iii</sup>EZRAHI, Y. (1990) *The Descent of Icarus: Science and the Transformation of Contemporary Society*, Cambridge, Harvard University Press, JASANOFF, S. (2004a) The Idiom of Co-Production. IN JASANOFF, S. (Ed.) *States of Knowledge: The Co-Production of Science and Social Order*. London, Routledge.

<sup>iv</sup>Smith has written an interesting article on why some single party regimes maintain their success. SMITH, B. (2005) Life of the Party: The Origins of Regime Breakdown and Persistence under Single Party Rule. *World Politics* 57, 421-451.

<sup>v</sup>STASAVAGE, D. (2005) The Role of Democracy in Uganda's Move to Universal Primary Education. *Journal of Modern African Studies*, 43, 53-73.

<sup>vi</sup>James Habyarimana, McCartan Humphreys, Daniel Posner, Jeremy Weinstein, "The Co-Ethnic Advantage: Diversity and the Impediments to Collective Action," (Paper presented at the Leitner Program in International and Comparative Political Economy, Yale University, December 2006). According to Ugandan political scientist Jim Occiti, however, these groups can be grouped into four main classifications: Luo to the North, Bantu, to the South and West, Nilo-Hamitic in the East and Sudanic to the North-West)

<sup>vii</sup>OCCITI, J. (2000 ) *Political Evolution and Democratic Practice in Uganda 1952-1996* New York, Edwin Mellen Press.

- <sup>viii</sup>SAUL, J. S. (1976) The Unsteady State: Uganda, Obote and General Amin. *Review of African Political Economy*, 5, 12-38. : 23.
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- <sup>xiv</sup>UZOIGWE, G. N. (1983) Uganda and Parliamentary Government. *The Journal of Modern African Studies*, 21, 253-271.
- <sup>xv</sup>Out of Uganda's 45 years of independence, political & military power has been in the hands of Museveni, a Westerner, for 22 years. Another two (1979-80) were in the hands of the Baganda.
- <sup>xvi</sup>WARD, K. (2001) The Armies of the Lord: Christianity, Rebels and the State in Northern Uganda, 1986-1999. *Journal of Religion in Africa*, 31, 187-221.
- <sup>xvii</sup>Ibid.
- <sup>xviii</sup>DUNN, K. C. (2004) Uganda: The Lord's Resistance Army. *Review of African Political Economy*, 31, 139-142.
- <sup>xix</sup>OMARA-OTUNNU, A. (1991) The Challenge of Democratic Pluralism in Uganda. *Issue: A Journal of Opinion*, 20, 41-49.
- <sup>xx</sup>DUNN, K. C. (2004) Uganda: The Lord's Resistance Army. *Review of African Political Economy*, 31, 139-142.
- <sup>xxi</sup>WARD, K. (2001) The Armies of the Lord: Christianity, Rebels and the State in Northern Uganda, 1986-1999. *Journal of Religion in Africa*, 31, 187-221.
- <sup>xxii</sup>See for example, REPORTER, S. (2006a) Uganda's Museveni Wins Election. *BBC News*. London The BBC called the 2006 elections the first multi-party vote in 25 years. There was high turnout in this election of 68%. EU observers noted problems with the campaign despite overall improvements. Opposition leaders draw attention to the fact that these elections appear to have been rigged, and opposition members harassed.
- <sup>xxiii</sup>BOWMAN, W. (2006d) Interview with Kaliisa (Kin) Ibrahim. Kampala, Office of the President.
- <sup>xxiv</sup>Established in 1922, Makerere University is one of the oldest and most prestigious Universities in Africa. In 1937, the College started developing into an institution of higher education, offering post-school certificate courses. In 1949, it became a University College affiliated to the University College of London. In 1963 it became the University of East Africa, offering courses leading to general degrees of the University of London. Prominent alumni include President Mwai Kibaki of Kenya, former President Benjamin Mkapa of Tanzania, former President and nationalist leader Julius Nyerere of Tanzania. Makerere has hosted faculty including Ali Mazrui, Mahmood Mamdani, and Ngugi wa Thiongo.
- <sup>xxv</sup>BOWMAN, W. (2007b) Interview with Joshua Mabonga. Kampala, Uganda Telecom Limited.
- <sup>xxvi</sup>STASAVAGE, D. (2005) The Role of Democracy in Uganda's Move to Universal Primary Education. *Journal of Modern African Studies*, 43, 53-73.
- <sup>xxvii</sup>JASANOFF, S. (2004b) Ordering Knowledge, Ordering Society. IN JASANOFF, S. (Ed.) *States of Knowledge: The Co-Production of Science and Social Order*. London, Routledge.: at 32-33.
- <sup>xxviii</sup>Data collected by author from Patrick Mwesigwa and Bob Lyazi of the Ugandan Rural Communications Development Fund, February 26, 2007.
- <sup>xxix</sup>BOWMAN, W. (2010) Interview with Bob Lyazi. Kampala, Uganda Communications Commission.
- <sup>xxx</sup>GIS analysis is ongoing to determine which parts of the country benefit most from these innovations. There are preliminary indications that the central and western parts of the country may be favored.
- <sup>xxxi</sup>A point of presence is a physical location that houses servers, routers, ATM switches and digital/analog call aggregators and other items needed to provide Internet services.
- <sup>xxxii</sup>BOWMAN, W. (2007c) Interview with Patrick Mwesigwa. Kampala, Uganda Communications Commission.
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- <sup>xxxvi</sup>CANNON, C. (1996) NGOs and the State: A Case-Study from Uganda. *Development in Practice*, 6, 262-265.
- <sup>xxxvii</sup>Ugandan Civil Society leader, July 27, 2006.
- <sup>xxxviii</sup>MOEHLER, D. C. (2006) Participation and support for the constitution in Uganda. *Journal of Modern African Studies*, 44, 275-308.
- <sup>xxxix</sup>STREECK, W. & SCHMITTER, P. C. (1985) Community, Market, State and Associations? The Prospective Contribution of Interest Governance to Social Order. *European Sociological Review*, 1, 119-138.
- <sup>xl</sup>Members from WOUGnet participated in the World Summit on the Information Society. The Ugandan Communications Commission invited WOUGnet to be a member of a national task force that attended the WSIS, but did not provide funding to participate. The Ugandan Communications Commission conducted four meetings with WOUGnet in May of 2005, before the WSIS process, on August 2005, after the WSIS process in November 2005 and in January 2006.
- <sup>xli</sup>BOWMAN, W. (2006f) Interview with Ugandan Civil Society Group 2. Kampala.
- <sup>xlii</sup>BOWMAN, W. (2006a) Interview with Dr. Baryamureba. Kampala, Makerere University.
- <sup>xliii</sup>BOWMAN, W. (2006e) Interview with Ugandan Civil Society Group 1. Kampala.
- <sup>xliv</sup>BOWMAN, W. (2006f) Interview with Ugandan Civil Society Group 2. Kampala. Both groups made similar comments regarding their relationship with the government.
- <sup>xlv</sup>ARNSTEIN, S. R. (1969) A Ladder of Citizen Participation. *American Institute of Planner's Journal*, 216-224. Perhaps a "bottom-up, top-down accountability" method as described by Fung would work well in the East African policymaking context. FUNG, A. (2004) *Empowered Participation: Reinventing Urban Democracy*, Princeton, Princeton University Press.: 79-83.
- <sup>xlvi</sup>KASSIMIR, R. (1999) Reading Museveni: Structure, Agency and Pedagogy in Ugandan Politics. *Canadian Journal of African Studies*, 33, 649-673.
- <sup>xlvii</sup>Ibid.: 652.
- <sup>xlviii</sup>Ibid.: 654.
- <sup>xlix</sup>Ibid.: 662.
- <sup>l</sup>EZRAHI, Y. (1990) *The Descent of Icarus: Science and the Transformation of Contemporary Society*, Cambridge, Harvard University Press. BOWMAN, W. (2010) Interview with Bob Lyazi. Kampala, Uganda Communications Commission.
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