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Global Information Society Watch 2009
Global Information Society Watch
2009
Dedicated to A.K. Mahan - an activist who valued intellectual rigour and concrete outcomes.
APC and Hivos would like to thank the Swedish International Cooperation Agency (Sida) and the Swiss Agency for Development and Cooperation (SDC) for their support for Global Information Society Watch 2009. SDC is contributing to building participation in Latin America and the Caribbean and Sida in Africa.
Introduction

Access to information is a human right and should be treated as such. Institutions should do everything they can, and all actors should pool their efforts to ensure that right. All sectors have to bear responsibility.1 This was the position stated by Paul Kagame, the president of Rwanda, when he was addressing the Geneva World Summit on the Information Society (WSIS) in 2003. The arrival of the internet in the 1990s marked the beginning of a new era for Rwandan citizens, whose doors to information were closed because of a bureaucratic government.

During the 1994 genocide against Tutsis, Rwandan citizens were exposed to false information whose purpose was to encourage people to play an active role in the killings of Tutsis and moderate Hutus. After the genocide, the Rwandan government faced the challenge of citizen mistrust in information, and made a commitment to promote access to information in order to develop the country, improve social welfare and foster national reconciliation and unity.2

Information and communications technologies (ICTs) came as one solution for the country to achieve this goal, and to strengthen the transformation from an agriculture-based economy to a knowledge-based economy by 2020. Technology and ICTs have been privileged as key enablers of this transformation, where access to information equals access to education and knowledge in order to stimulate innovation.

Policy environment

The Rwandan government has embraced ICTs out of necessity, not choice.3 In 1998 the Rwandan ICT-led Socio-Economic Development Policy and Plan was formulated.4 Its implementation is through four five-year plans known as the National Information Communications Infrastructure (NICI) Plans. At the moment, Rwanda is implementing the second plan period (NICI II), committed to putting in place the infrastructure to allow widespread access to ICTs in the country.

Rwandan ICT for development policy aims at promoting universal access to ICTs and systems.5 With the liberalisation of the telecommunications market, Rwanda also recognises the importance of increasing citizens’ access to information. The current policy environment has encouraged various initiatives in the ICT sector. Today, a national portal6 provides information on all Rwandan economic sectors to help the general public, researchers and policy makers easily access information, and share knowledge, experiences and best practices. Community telecentres, being built all over the country through the implementation of NICI II, together with the pilot of the information kiosks set up in key public institutions, are providing information to the public. They are going to be supported by two mobile telecentres7 to reach people who have been underserved in terms of lack of electricity and other infrastructure. The mobile telecentres are buses, each containing twenty computers connected to the internet, as well as equipment such as printers and scanners, and a generator to provide electricity.

Other projects have also been launched. E-soko,8 for example, intends to offer access to information on agricultural markets and other aspects of farming in order to help with better planning.9 It is possible today to access information on Rwandan embassies,10 and an e-gateway for all districts of the country has been launched.11 Some key services accessible online in Rwanda include:

- An e-procurement platform called dgMarket12 that offers information on the public procurement process in Rwanda
- Online visa application facilities13
- Tax declaration facilities and application for a tax clearance certificate14
- Access to social security information
- Shopping via the B-web run by Kigali Bank.15

Initiatives such as the implementation of a national identity registry system and connecting local government institutions to one network are already in place. These are being run by the Ministry of Local Government, Good Governance, Community Development and Social Affairs (MINALOC). In the health sector, TRACnet was established and has been implemented by the Treatment and Research AIDS Centre (TRAC), based at the Ministry of Health, since 2005.16

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1 UNECA (2003) Round Table on Creating Digital Opportunities, 10 December. www.uneca.org/aisi/wsisis2003/Round%20Table%20on%20CREATING%20DIGITAL%20OPPORTUNITIES.htm
3 www.unis.unvienna.org/unis/topical/wsisis/highlights-10dec03.html
4 NICI Plan: www.uneca.org/aisi/NICI/country_profiles/rwanda/rwanpol.htm
5 NICI II Plan, p. 17.
6 www.rwandagateway.org/article.php3?id_article=1273
8 www.esoko.gov.rw
9 NICI II Plan, p. 147.
10 www.embassy.gov.rw
11 www.district.gov.rw
12 www.market.gov.rw
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14 mail1.rra.gov.rw
15 www bk.rw/eng ans/vb_web_internet Banking.html
**Legislative environment**

Access to information goes hand in hand with freedom of opinion, which is a constitutional right for Rwanda. Article 33 of the constitution states that freedom of thought, opinion, conscience, religion, worship as well as the freedom of information are guaranteed by the state in accordance with conditions determined by law.

With the implementation of the NICI II Plan, there is a need to enact the enabling laws. Rwanda has enacted telecommunications legislation, the multi-sector regulatory law, and intellectual property rights legislation. However, laws to support e-commerce and other internet-related activities are still absent. These include broadband regulations (Rwanda has no broadband policy); laws relating to online security, including digital signatures and encryption; laws relating to data privacy; and access to information legislation. Steps towards developing the latter are being taken by the Media High Council.

**Access to online education materials**

The Rwanda government has opted to meet the goal of “Education for All”, including enhancing the quality of education. The education sector’s policy states that ICTs are “the heart of the education system.” The policy considers the importance of ICTs as lying “less in the technology itself than in its ability to create greater access to information and communication in underserved populations.”

The Ministry of Education (MINEDUC) has already drafted an ICT policy to guide the deployment of ICTs in the ministry to support its organisational activities and operations within the framework of the national ICT-led development vision (called Vision 2020). The ultimate goal is more effective creation and delivery of educational products for improved teaching and learning in Rwanda.

It is expected that a clear road map for the integration of ICTs in education will also be developed, which will, among other things:

- Increase access to basic education for all, both formal and non-formal, where ICTs are one of the main tools for learning and teaching, and for seeking and sharing information.
- Improve the quality of basic education and promote independent and lifelong learning, especially in secondary and tertiary education.
- Contribute to the availability of a workforce with the ICT skills needed for employment and use in a knowledge-based economy.
- Ensure that Rwandans can compete and cooperate in an increasingly interconnected world.
- Ensure that Rwanda has in place an ICT-driven process that supports evidence-based decision making with respect to resource allocation, strategic planning, and the monitoring and evaluation of educational policy implementation.

Even though the above-mentioned ICT in education policy is still awaiting approval, there are some ICT-oriented projects that are being implemented in education. Apart from the One Laptop per Child (OLPC) project, there is Rwednet, whose expected outcome is the development and promotion of research and education networking communities in and outside the country. Meanwhile, the national examination council is developing a platform that helps O-level and A-level students get their exam results on mobile phones and online. Another initiative is the Rwanda Education Commons (REC), whose aim is to facilitate widespread access to education information and materials.

The REC, initiated by the Global Learning Portal Alliance (GLP) in October 2008, is the first pilot of the Africa Education Commons. This is a virtual space where teachers, learners, parents and stakeholders from government, business, non-governmental organisations, education institutions and civil society will be able to share resources and collaborate with each other to meet African education challenges.

The REC brings stakeholders together to collectively design a programme that will coordinate, support and leverage ICT investments for education in Rwanda to ensure their effectiveness, integration into national policy, and sustainability, and develop and support state-of-the-art ICT programmes to enhance Rwanda’s education system.

To achieve these objectives, the project will develop the Commons learning platform, which will feature an online portal with interactive features and tools to promote collaboration among educators and provide access to materials, such as digital learning libraries. It will also provide offline channels of delivery and support, including CDs for unconnected computer labs, and leverage other technologies, including radio, mobile phones, and satellite and broadcast television to deliver relevant and up-to-date educational content. Additionally, it will provide a mechanism for coordinating ICT in education activities, including funding positions on the ground in Rwanda; facilitate the digitisation of educational content in areas identified by Rwandan stakeholders; and train trainers to facilitate the use of the Commons learning platform at designated access points.

The first round of digital learning materials available on the Commons platform are expected to improve the quality of primary school teaching in Rwanda through their use at pre-service and in-service primary teacher training programmes. The Commons will also, amongst other things, make available digital learning materials for income-generation activities, and a database of education projects in Rwanda for policy makers and administrators.

19 rwanda.glp.net/home
New trends

In Rwanda new technologies are under development to increase access to information via various and diverse channels. The government is assisting both pupils and communities to acquire laptop computers and mobile phones. At the same time, Korea Telecom is managing the implementation of the national fibre-optic backbone. The project is expected to be completed by the end of this year. The country has engaged in discussions with the Seacom and TEAMS fibre-optic submarine cables in order to prepare for accessing them as soon as they start operation. Rwanda is looking to buy fibre bandwidth capacity in order to distribute it to schools and health centres, amongst others.

Another ICT infrastructure project is being set up on the top of the Kalisimbi volcano. It will increase access to information for Rwandans, as well as for other countries in the region. It is expected that the project will increase FM radio range to a 700-kilometre radius by enhancing antennae orientation (vertical as well as horizontal polarisation). It will also offer digital video broadcasting following the pilot phase (with a 250-kilometre radius), and internet connectivity (50-kilometre radius) for rural connectivity.

Pay TV is another new source of information in Rwanda. A Chinese broadcasting company, Star Media, is offering pay TV services via a terrestrial digital network. The initial network is based around a transmitter site in Kigali, but they plan to cover the whole east African region.

Action steps

The fact that the country had almost no ICT infrastructure before the NICI plan explains why there is still a long way to go. Despite progress recorded in online access to information, several steps need to be taken regarding the policy and regulatory framework, as well as access to infrastructure and human capacity building. First, some important policies and laws are still lacking. This includes a broadband policy. To avoid a concentration of ICT services in major urban areas, there is a need to reinforce a shared-infrastructure regulatory policy to allow smaller players in rural areas to access the network backbone at a low price.

Rwanda is a trilingual country where Kinyarwanda, English and French are used. Where ICT services are available, they are not always suited to local needs, and relevant local content remains a key constraint. Securing access to services should be seen both as a question of delivering them and empowering the community to access them, in order to effectively secure broader developmental benefits.
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