Critical Issues for ICT in Local Financial Management

Post-Conflict / Low-Capacity Contexts

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"ICT, as defined in the Information & Communication Technologies Strategy Paper of the World Bank Group (April 2002), consists of hardware, software, networks, and media for collection, storage, processing, transmission, and presentation of information (voice, data, text, images)."
1- How to apply ICT to jump-start and improve decentralized Financial Management and Accountability Arrangements (FMAAs) in order to support functioning local government systems in Post-Conflict/Low-Capacity countries, improve inclusiveness, transparency, accountability, and service delivery.

2- What should be the sequencing, the effective prioritization?
**RATIONALE**

- Countries are pursuing strategies of decentralization.
- ICT is essential for the reconstruction and development efforts.
- ICT can draw a large amount from the always scarce funds.
- Once peace is established and stabilization achieved, there is an immediate rush to help a country.
- **Two countries were chosen by PREM for this study: Sierra Leone and Rwanda.**
- Post-conflict/Low-Capacity countries pose particular challenges: combination of political and cultural environment, conflict scars, disorganization of public structures and the damages inflicted to the country's infrastructure.
- National and regional stability is vital to the planning and implementation of decentralized financial management, while political instability or conflict remissions can damage or destroy any reconstruction and development project.
MIXED OPINIONS AND VISIONS

- Skepticism on ICT x Enthusiasm on ICT.
- ICT scepticals vs ICT believers.
- Memories and reports of failed or over-engineered projects funded by the World Bank (over 1,1 billion dollars have been invested in FMIS worldwide, according to a study).
- Other needs to be served: health, food, sanitation, shelter, repairs on the damaged infrastructure.
- Simplicity x Complexity.
- What is the most appropriate technology?
- What should be done first? How to face the hurdles?
- How to match the technology to the job?
KEEP IN MIND

• Success will require investments in change management and capacity building.

• A holistic view is vital, considering that ICT will not solve all the problems per se and should not be taken as a panacea.

• ICT strategies for the countries can make a big difference, while expectations might go unfulfilled and investments might become a waste of scarce funds if plans are not well elaborated and implemented.

• Avoid “techno-determinism”, i.e., ignoring the social aspects of technology, and viewing ICT as if they would have autonomous powers to govern lives and produce change.
CASE STUDY

SIERRA LEONE AND RWANDA

Sierra Leone: Mission starts, coincidentally with the first IRCBP Evaluation Mission and field trips to all the Local Councils

Rwanda, second part of the Mission
As of May 2004, the World Bank had approved a total of 5 IBRD loans and 40 IDA credits and grants for Sierra Leone for a total amount of approximately US$686.2 million. The commitment value of eight ongoing World Bank operations is approximately US$184 million.
**SIERRA LEONE**

<table>
<thead>
<tr>
<th>Population: 5.2 million</th>
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<tbody>
<tr>
<td>Surface Area: 71,740,000 sq km</td>
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<tr>
<td>Population growth rate (annually): 2.0%</td>
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<td>Life expectancy at birth (years): 37.4</td>
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<tr>
<td>Infant mortality per 1,000 births: 165.0</td>
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<tr>
<td>GDP (current US$): 782.9 million</td>
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<td>GNI per capita (current US$): 140.0</td>
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Sierra Leone is a west African country, and became a republic in 1971.

The post-independence history has been marred by extremely poor governance, gross economic mismanagement and war.

The Revolutionary United Front (RUF) launched first attacks in 1991. Rebel terror attacks continued until 2000. Civil war officially considered as ended in Jan 2002. 50,000 people died, many were mutilated.

The WB approved in 2004 an IDA grant of US$25.12 million for the Institutional Reform and Capacity Building Project, to implement a sustainable fiscal decentralization strategy and help establish a culture of transparency and accountability in local governments.

The UN Security Council established the United Nations Mission in Sierra Leone (UNAMSIL) in October 1999, initial force of 6,000. Over time, the mandate was broadened and the authorized force reached 13,000 troops. Strength as of Jan 2005: 4,000 troops.
After the 1994 genocide, the Bank responded quickly with emergency recovery aid of about US$190 million. With the help of UNDP, the Bank organized the mobilization of donors, the coordination of their activities and the implementation of several rehabilitating projects.

As of June 2004, the Bank was supporting nine ongoing projects with a commitment value of approximately US$292 million.
| RWANDA |
|-----------------|-----------------|-----------------|
| Population: 8.2 million  | Rwanda is a small, densely populated, landlocked country in Central Africa. The capital, Kigali, is approximately located in its geographical center. |
| Surface Area: 26,340.0 thousand sq km  | A new Constitution was enacted in June 2003. The first multi-party presidential and parliamentary elections since independence were held in August and September 2003. |
| Population growth rate (annually): 2.9%  | Economic growth and social changes are severely constrained by the shortage of skilled people. |
| Life expectancy at birth (years): 39.8  | One million children — 12 percent of the total population — are orphans, cared for by impoverished family or community networks. |
| Infant mortality per 1,000 births: 118.0  | In October 2004, the Rwandan Army for the first time in history participated in a peacekeeping operation, in Sudan. |
| GDP (current US$): 1.7 billion  | |
| GNI per capita (current US$): 230.0  | |
| More than 900,000 people died during the 1994 genocide.  | |
Typical Views in Post-Conflict Countries

Walls Perforated by Bullets

Local Election Day

Situation Stabilized, Children Back to School

UN Secretary-General In Rwanda, 1994

UN Mobile Telecom Unit

Post-Conflict Destruction

Amputees

UN Convoy
Forces Driving and Influencing Financial Management Reform and Decentralization

**Governments’ Interest**
- Improve Public Finance
- Develop Local Communities in Rural Areas
- Build Trust in Local Governments

**Stakeholder’s Interest**
- World Bank, IMF
- UN, DFiD, SIDA, other donors
- NGOs
- Universities, Schools
- Civil Society
- Suppliers of Goods and Services
- Individuals

**Process Change**
- NO to Corruption
- More transparency
- Organization
- Capacity Building
- Work-Flows/ Design and Redesign
- Budget Preparation, MTEF
- Good Procurement Practices
- Timely reports and transactions records
- Political Influences to a minimum

**Technological Change**
- Innovation
- Resources’ Sharing
- Creative Solutions
- Cost Effective use of Technology
- Capacity Building
  - Wireless Technologies
  - Convergence
REFORM INTERACTIONS

CONCEPT

FINANCIAL MANAGEMENT REFORM AND DECENTRALIZATION

Strategy, Objectives, Plan, Change, Execution, Monitoring, Measuring

SIERRA LEONE
MOF, MLOC
Institutional Reform and Capacity Building Project
Direct Transfers to LGs

RWANDA
MOF, MLOC
CDF
Direct Transfers to LGs

Orientation Funds Requests Reports Suggestions Tech Support

Local Governments

Wars, regional or internal instability, culture, resistance to change

Parliament
Auditor General

Civil Society
Media

Stakeholders
NGOs

Universities
Schools
Donors
INTERDEPENDENCY

CENTRAL GOVERNMENT

DECENTRALIZATION
FINANCIAL
MANAGEMENT
REFORM

Capacity Building
Institutions

Universities,
Schools
Training centers

Local
Government

Private
Sector
# Hurdles and Logistical Difficulties

## Major Hurdles

**Power Supply** (or electricity): the challenge call for solar panels, batteries and portable generators.

**Telecommunications Infrastructure:** The reality calls for wireless solutions due to the network inexistence in the remote areas, while at the same time it is important to have an adequate scenario for investments from the private sector.

Telecom sector reform in post-conflict/low-capacity countries is vital.

**Capacity:** Loss of human capital is a big problem. Investing on learning institutions is very important. Never underestimate the existing capacity that may be hidden or go unmeasured.

A skilled workforce is essential, and retaining it is a challenge too.

## Logistical Difficulties

The geography of a post-conflict country should always be examined.

Locations pose challenges for ICT equipment maintenance and training.

There are no stores like COMPUSA nearby to find parts or to take equipment for repair.

Helicopters when existent are for military operations and operated by UN troops or the country’s Armed Forces.

Difficulties will affect sustainability, systems and equipment maintenance.

Poor roads and lack of infrastructure mark the work in post-conflict countries.
LOGISTICAL DIFFICULTIES

UN HELICOPTER FLEET IN SIERRA LEONE

ROAD UNDER REPAIRS

IDEAL

REALITY
Radio, computer and printer had been provided by UNDP. Average local temperature was high and a fan was positioned. Batteries were on the floor and an electricity generator outside the building. HF radio being used for communications with the other Councils and the Ministry of Local Government, in Freetown. Due lack of maintenance, e-mail and Internet had been inoperative for a year.
ELECTRICITY

IDEAL

REALITY
Sierratel’s tower in Bo, Sierra Leone. Electricity provided by a generator.
The young economist had graduated from a College in Kigali. The District had no electricity, but the official had a lap-top.

The official was attending ICT related courses sponsored with WB funding.

Measures should be taken to retain skilled workers in the public sector. Their marketability grows rapidly after taking courses and developing capacity.

A skilled workforce is essential!
STRATEGY, VISION AND LEADERSHIP

- Leadership, strategy, implementation, cross-sectoral co-operation, and inter-government, as well as intra-governmental co-operation, are determinant and interdependent.

- Information champions play an important role.

* A national ICT strategy is essential, and should be embedded in the national development strategy.*
POLITICAL SUPPORT FROM THE HIGHEST OFFICE

- ICT policies should be formulated at the highest possible level, and taking advantage of the usual momentum for reconstruction and re-organization in the conflict aftermath period.

- Coming directly from the Chief of State is the ideal situation.

- The elaboration and execution of a national ICT strategy with a particular chapter allotted for the Local Governments is essential.
ICT CHAMPION

• A person must be appointed to play the role of Information Champion at the Minister of Finance.

• Where reforms have created a Ministry of Local Government, an attitude of political rivalry or friction between ministries can occur, with regard to ICT.

• Sound ICT policies can support to depoliticise things and improve management practices.

• In each Local Government a person should be appointed to play the role of the local Information Officer, regardless the simplicity of the systems and equipment being used.

ICT CAN NOT BE LEFT LOOSE IN THE PUBLIC ADMINISTRATION!
DESIGN

Simpler Systems for the Local Governments:

- In Local Governments the level of activity and layers of management are simpler.

- The tendency of applying overly complex systems should be avoided.

- The initial requirements are for basic functions: budget execution, expenditure management, commitment management (obligation control inside the budget control), and general ledger.
DESIGN

• As the process of decentralization unfolds, other modules can be included and “turned on”.

• Example: a revenue management function to track revenue, due to the importance of this function in any decentralization process that aims to generate revenue locally.

• As capacity grows and the local government organization becomes more complex, more modules can be added.
A WEB-BASED APPLICATION FOR THE LOCAL GOVERNMENTS

A web-based application is a software package that can be accessed through the web browser.

The software and database reside on a central server rather than being installed on the desktop system.

Access to the application is through a web-browser over a network.

It is not necessary to update and maintain each and every user’s desktop in the organization.

The web application only needs to be installed on 1 web server machine.
WEB–BASED
FINANCIAL MANAGEMENT SYSTEM

INTERNET
MINISTRY OF FINANCE
SERVER
DATABASES
LOCAL GOVERNMENTS
TRANSMISSION OF FINANCIAL REPORTS

- Periodical reports can then be transmitted through different methods:
  - Financial data entry by an operator at the MOF upon receiving a printout or e-mail with the attached report from the local government.
  - Floppy disk, CD, or portable disk containing the information, at the nearest place where a connection is available.
  - Electronic transmission directly from the Local Government, where connections already exist (dial-up, VSATs, leased lines).
PROACTIVE SOLUTIONS: BRINGING THE LOCAL GOVERNMENTS TO THE NETWORK WHERE THE NETWORK HAS NOT REACHED THEM

- Instead of bringing the network to the Local Government, the Local Government official can be brought to the nearest point or location of the network.

- Then he can access the IFMIS on the web (Internet), log-on as a user, and record transactions.

- Through he/she logging into the system, the system will then be able to determine “who they are” and “what their data-access rights are”.

- Financial transactions will be entered instantaneously where connections are available, or can be entered once a week (every Friday for example), as soon as the file which was recorded locally is transmitted from the nearest point of the network grid.
USING VSATs FOR VOICE TELEPHONY IN RURAL AREAS FOR INTERNET ACCESS

A REAL TEST DONE IN RWANDA!
• In Rwanda the company ARTEL has deployed over 200 VSATs units with solar panels throughout the country, for voice telephony using prepaid cards.

• However, the infrastructure is also able to provide Internet and data services.

• Certainly it is less expensive for the Local Governments to use a network as clients of a private enterprise, instead of maintaining their own network.

• The initiative can also be coupled with others and contribute to bridging the digital divide within the region.
I COULD BE CHECKING MY EMAIL FROM HERE.

MAYBE IN THE FUTURE WE WILL HAVE INTERNET HERE!!
SIERRA LEONE
Mobile Phone Operator
CELTEL

- A Successful Case: CELTEL

- Over 120,000 lines, 99% prepaid

- Sierratel, the local telecom monopoly: only 15,000 land lines

- CELTEL received support from the IFC

- CELTEL’S Staff in Sierra Leone informed plans to become a wireless Internet Service Provider
SIERRA LEONE
LEAPFROGGING THE TECHNOLOGY
Mobile Phone Operators Such as CELTEL Can Become ISPs
LESSONS ON SEQUENCING

• The use of ICT in post-conflict countries should be increased cautiously and responsibly, with optimism and without exaggeration.

• It is worthless to invest in ICT without addressing capacity building or modifying human resource practices.

• A simpler financial management system at the local level can produce information to be recorded in a web-based IFMIS with an easy interface for local users.

• Spreadsheets at the local level that can be recognized by the national IFMIS and translated into useful information for decision-makers would suffice for the purpose of decentralization of financial management in the first phase.
LESSONS ON SEQUENCING

- The usual hurdles with regards to connectivity can be addressed with creativity and using “kiosk” points, Internet cafes, and other points were the network is already present.

- The use of ICT will not represent a magical solution for solving financial problems in post-conflict/low-capacity countries, but can play a very important role and is indispensable.
LESSONS ON SEQUENCING

• ICT can support the decentralization process and facilitate initiatives aimed at achieving greater transparency and reduced corruption in government and strengthening democracy in a world with less poverty and more social justice.

• Buying integrated financial systems software licenses before investing in the whole requirements can turn the usually expensive copies that are purchased useless.

• Consider the risk of having to pay for technological updates even before using the system.
<table>
<thead>
<tr>
<th>S T R A T E G Y</th>
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<tbody>
<tr>
<td><strong>IMMEDIATE</strong></td>
</tr>
<tr>
<td>Is there a <strong>National ICT Strategy</strong>, embedded in the National Development Strategy?</td>
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<tr>
<td>If yes, what should be improved or amended?</td>
</tr>
<tr>
<td>If not, start procedures to have one, giving adequate importance to ICT</td>
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<tr>
<td><strong>Telecom Sector:</strong></td>
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<tr>
<td>Check the regulatory environment</td>
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<tr>
<td>Check conditions for investments</td>
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<tr>
<td>Is there a local telecom monopoly?</td>
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<tr>
<td><strong>Internet Sector</strong></td>
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<tr>
<td>Assess the sector: number of Local Governments to the Internet</td>
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## Infrastructure

<table>
<thead>
<tr>
<th></th>
<th>1st Year</th>
<th>2-3 Years</th>
<th>after 3 Years</th>
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<tbody>
<tr>
<td><strong>IMMEDIATE</strong></td>
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<td></td>
<td></td>
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<tr>
<td>Assess electrical power supply</td>
<td></td>
<td>Invest in electrical power supply, telecommunications and Internet infrastructure</td>
<td>All Local Governments</td>
</tr>
<tr>
<td>Repair and purchase generators, batteries, solar panels</td>
<td>All Local Governments buildings with some electricity, at least for the radio, computers and printers</td>
<td>provided with enough electricity, hardware and software for their regular operations</td>
<td></td>
</tr>
<tr>
<td>Assess telecommunications</td>
<td>printers</td>
<td>Internet Infrastructure</td>
<td></td>
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<tr>
<td>Make a list (inventory) of all the hardware available (computers, printers, etc) and softwares</td>
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<tr>
<td>Local Governments without telecommunications should be provided with radios</td>
<td>All Local Governments with some telecommunications. If not available, the nearest point</td>
<td>All Local Governments with telecommunications, even at different levels</td>
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<tr>
<td>Purchase and install stand-alone computers, lap-tops and printers, should be used as the contact place (can be the closest town)</td>
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<tr>
<td>Local Governments connected to the Internet, as many as possible</td>
<td>Increase the number of Local Governments connected</td>
<td>All Local Governments connecting to the Internet and able to perform transactions on the Internet</td>
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<tr>
<td>Check distances and road conditions to Local Governments, have a logistic plan for maintenances, including technical assistance, repairs and parts</td>
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## IMPLEMENTATION - FMAS

<table>
<thead>
<tr>
<th>immediate</th>
<th>short-term</th>
<th>medium-term</th>
<th>long-term</th>
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<tbody>
<tr>
<td><strong>FMAS: Financial Management</strong></td>
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<tr>
<td>Check existence of FMAS in LGs</td>
<td>Train officials in spreadsheets</td>
<td>Implement an IFMIS with a module for the Local Govts</td>
<td>All Local Govts recording financial data in the IFMIS, through different means</td>
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<tr>
<td>Check amount of people with basic computer skills</td>
<td>Install simpler financial management software at the Local Governments</td>
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<tr>
<td>Check Universities or Schools that can partner in training</td>
<td>Start to periodically transmit financial reports through electronic means</td>
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<tr>
<td><strong>IFMIS: Integrated Financial Management Information System</strong></td>
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<tr>
<td>Check IFMIS in the Central Government</td>
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<tr>
<td>Define purpose and scope of financial management system at the local level</td>
<td>Pool resources from multiple sources and donors</td>
<td>Consider the possibility of having a donors and stakeholders website where information can be accessed on a daily basis</td>
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<tr>
<td>Recruit the right project team</td>
<td>Process LGs financial information</td>
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<tr>
<td>Choose a well-skilled and respected project leader</td>
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<tr>
<td>Sell the project to decision makers</td>
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<tr>
<td>Communicate often with stakeholders</td>
<td>Use prototypes to ensure understanding and agreement about design</td>
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<tr>
<td>Look for existing models</td>
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<td>Match the technology to the job</td>
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<tr>
<td>Understand &amp; improve processes before you apply technology</td>
<td>Integrate with related processes and practices</td>
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</table>
Thank you
Danke
Xie xie
Khawp khun
Yum bööc
Salamat
Mahalo
Juspalarña
Spacibo
Obrigada
Arigato

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