

**Local Governance and
ICTs Research Network for Africa
(LOG-IN Africa)**

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Final Technical Report

by

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1. Synthesis

Local Governance and ICTs Research Network for Africa (LOG-IN Africa) is a pan-African network of researchers and research institutions in nine countries¹. It was formed in 2005 to assess the current state and outcomes of e-local governance initiatives in Africa, and in particular how ICTs are being used to realise good local governance. The overall research question is *“What progress has been made and what are the outcomes in the provision of e-local governance in Africa; what are the challenges and threats; and what are the good practice strategies and solutions that are emerging?”*.

LOG-IN Africa has the general objective of informing, supporting and orienting African countries and other stakeholders in their policies and practices concerning the application of ICTs to local governance. As the first phase came to an end in June 2008, LOG-IN Africa organized a Final Workshop from 3rd – 4th June 2008 where the African researchers from the above countries presented their individual country research findings and the lessons drawn from the research for a draft e-local governance roadmap. The workshop was followed by the e-local Governance International Conference from 5th – 6th June 2008. About 50 international participants and some 15 Egyptian dignitaries and personalities attended the Conference comprising e-local governance researchers, practitioners, policy-makers from governments, academia, industry and non-governmental organizations to share the latest findings in the theory and practice of e-local governance. This conference was very successful and most participants rated it very highly in the evaluation.

The Official Opening Ceremony of the conference was honoured by the presence of H.E. Dr. Ahmed Darwish, Minister of State for Administrative Development (Egypt) who delivered the opening and keynote address. The conference was also be honored by the presence of Dr. Aly Moselhy, Minister of Social Solidarity, Gen. Abdelsalam Mahgoub, Minister of Municipal Development, Dr. Aly Abdel Rahman, the President of Cairo University, as well as Dr. Abdelazeem Wazeer, the Cairo Mayor and Eng. Sayed Shehata, the Giza Mayor.

Table 1 shows the specific objectives of the Network and the achievements so far:

Table 1: Achievements

Network specific objective	Achievements
(a) To establish an “open” pan-African research network, based on key partner institutions, to support research, training and implementation of activities in	<ul style="list-style-type: none"> ▪ The LOG-IN Africa Research Network has been successfully established with the effective finalization and implementation of the Memorandum of Grant Condition between CAFRAD and IDRC, and the contract finalized with all National Research Teams ▪ Appointment of a scientific advisory team whose main role is to provide scientific input during the research process and provide quality

¹ The institutions involved are Faculty of Computers and Information, Cairo University, Egypt; Department of Computer Science, Addis Ababa University, Ethiopia; Institute for Development Studies, University of Nairobi, Kenya; SOPSPAM, University of Technology, Mauritius; School of Science and Engineering, Alakhawayn University, Morocco; Department of Mathematics & Informatics, University Eduardo Moudlane, Mozambique; SAFEFOD, Senegal; WITS University Graduate School of Public and Development Management, South Africa; and Faculty of Social Sciences, Makerere University, Uganda.

Network specific objective	Achievements
the area of ICTs for local governance in Africa	<p>control of the outputs produced. It consists of world-renowned scholars in the African diaspora community, guaranteeing quality in scientific value addition and commitment to African issues. The two are Prof. Mammo Muchie (Ethiopian), Director of Research Centre on Development & International Relations, Aalborg University, Denmark and Prof. Joseph Migga Kizza (Ugandan), Professor, Department of Computer Science, College of Engineering and Computer Science, The University of Tennessee-Chattanooga, Tennessee, USA. In addition, we have a re-known ICT practitioner within the continent, Dr. Mohammed Timoulali (Moroccan), Regional Advisor, UNECA. Among them, the advisors have skills and expertise, which is multi-disciplinary in scope in line with the multi-disciplinary nature of e-governance. These advisors have been invaluable in reviewing the Network outputs and adding value to them.</p> <ul style="list-style-type: none"> ▪ Mobilization of Africa-wide expertise was achieved by identifying the relevant experts in selected countries and having them contribute to the LOG-IN Africa Network, including participating in the First Workshop in June 2006, Team Leaders meeting in November 2006, Mid-term Review in June 2007, Final workshop and international conference in June 2008. ▪ The LOG-IN Africa Web Site and Virtual Research Platform was also successfully developed (www.loginafrica.net)
(b) To define a common framework and an accepted methodology of measurement	<ul style="list-style-type: none"> ▪ A report on comprehensive review of the literature on e-Governance research ▪ Report of the LOG-IN Africa methodological workshop “Pan-African Local E-Governance Conceptual and Methodological Framework” presented by the Network Research Coordinator, endorsed by the Team Leaders in Uganda (November 2006) and written up as an academic article. The framework was published in the African Journal of Science, Technology, Innovation and Development (AJSTID). The framework in this article guided research in all national projects.
(c) To assess the multi-dimensional effects of ICTs on local governance in Africa	<ul style="list-style-type: none"> ▪ All countries, except Egypt, customized the “Pan-African Local E-Governance Conceptual and Methodological Framework” to suit their project focus. The Egyptian project did not involve assessment of the effects of ICT but the development of a tool for business process mapping. We believe this tool can be used by other African countries, with modifications, in the process of e-government implementations. ▪ All countries successfully completed their e-local governance projects and presented their findings in the June 2008 international conference.
(d) To develop guidelines for “e-Local Governance” projects in Africa in support of the successful local implementation of ICTs for local governance	<ul style="list-style-type: none"> ▪ A draft e-local governance Roadmap was produced and electronically discussed by the members. The Roadmap was synthesized and re-defined and was presented in the June 2008 international conference. The framework was published in the African Journal of Science, Technology, Innovation and Development (AJSTID).
(e) To increase awareness and reinforce institutional capacity in ICTs for local governance in Africa	<ul style="list-style-type: none"> ▪ Almost all national projects have created multi-disciplinary teams composed of engineers/computer scientists and social scientists to research e-governance ▪ Egypt, Ethiopia, Kenya and Mauritius have established working relationships with the agencies in charge of e-government initiatives ▪ Some of the researchers are members of the national e-government policy and strategy structures/forums (Mauritius, Egypt) ▪ In Morocco, the achievements achieved in LOG-IN Africa project (e-Fez and e-Larache) have become examples that other city and

Network specific objective	Achievements
	<p>provincial governments are keen to replicate. This project has won three awards: UNPSA award, eMTIAZ 2006 and Africa’s 2007 TIGA award.</p> <ul style="list-style-type: none"> ▪ The Ethiopia team conducted three major awareness campaigns targeting both decision makers and Kebele officials. The intent of the campaigns was sensitization and awareness creation. The campaigns brought in an immediate effect with the city government of Addis Ababa moving to launch the program entitled “ICT for Community”. The city government of Addis Ababa organized and sponsored the training of Kebele employees drawn from 55 Kebeles on basic computer applications which is another evidence of the success of the team’s sensitization and awareness campaigns. ▪ In Mauritius, the final national workshop on policy dissemination on e-Local Governance was attended by Minister of Local Government, Local Authorities Chief Executives, IT Officers and High Level Delegation from the Government of Uganda led by Mr. S.Purmessur form Ministry of Local Government Mauritius, Secondary Schools Students and IT Education Officers. This event was extensively covered by the Mauritius Broadcasting Corporation (TV). ▪ In the June 2008 conference, the LOG-IN Africa countries managed to invite the top persons in charge of e-Government and governance or public sector reform. This was a demonstration of the strong partnership that has been created between the researchers and government officials in charge of governance as well as e-Government. In the conference, these partnerships deepened and behavioural changes were evident. ▪ In Kenya, Prof. Waema has been requested to lead a team to review the existing national e-Government strategy and develop the next five-year national e-Government strategy. This strategy will have a very strong component of e-local governance, an issue that was discussed and agreed with the top e-Government and public sector reform bosses during the June conference. In addition, Ms Edith Adera has been requested by the e-Government Director to sit on the reference committee for this exercise.
(f) To widely disseminate its research results in order to influence policies, inform practice and add to the knowledge base in the area of e-Local Governance	<ul style="list-style-type: none"> ▪ Dissemination forums in which LOG-IN members have profiled the activities and results of the Network in workshops and conferences. This are summarized Section 4. ▪ All countries organized national workshops to share their research results with key stakeholders. In Ethiopia, fore example, there was a multi-stakeholder consultative workshop where the research project was presented and discussions held on partnerships beyond the first phase of LOG-IN Africa. ▪ The Network organized an international conference on e-local governance in Cairo in June 2008 and shared the findings with researchers, practitioners and policy makers. The proceedings of the conference were published and disseminated. ▪ The Network members published over 65 papers and articles in refereed journals, conferences and workshops ▪ The Project Coordinator was invited to Ottawa to make a presentation on LOG-IN Africa to a HAITI visiting mission ▪ The South African ICT agency (SITA) invited the Project Coordinator to as a keynote speaker to present the draft e-local governance roadmap. SITA found out about LOG-IN Africa through the Internet

2. The Research Problem/Objectives and Status

The LOG-IN Africa Research Network is assessing the current state and outcomes of e-local governance² initiatives in Africa. The research problem stated in section 1 was broken down into component research problem/questions and research objectives for each country as shown in Annex 1.

The status of each national project is summarized below:

Egypt

- Established a project laboratory and recruited research assistants
- Identified and reviewed applicable relevant business process mapping methodologies – produced Business Process Mapping technical report
- Produced 1st progress report
- Produced a paper to propose a multi-perspective model that captures all aspects of an e-government project – The Case of E-Alexandria.
- Completed the Requirement Analysis of the E-government program
- Reviewed e-government business processes
- Compiled interim findings and presented them (as 2nd progress report) in the mid-term workshop in June 2007 in Mauritius
- Developed a methodology to properly document all aspects of service delivery business processes
- Built and tested associated software tool that facilitates the use of the developed methodology
- Article accepted and published in the proceedings of the 1st International Conference on Theory and Practice of Electronic Governance, Macao, China, 10-13 December 2007
- Presented an article in the OICC conference held in Ankara, Turkey, 18th -20th June 2007
- Organized a workshop for the ministry (MSAD) and presented the technical methodology
- Presented the overall findings in the final LOG-IN-Africa workshop held in Cairo on 3rd-4th June 2008
- Presented a paper in the LOG-IN Africa e-Local Governance International Conference in Cairo, Egypt on 5-6 June 2008

Ethiopia

- Customized the Pan-African conceptual and methodological framework to suit the Ethiopian project
- Conducted a preliminary survey to choose the Kabeles and the E-government application to be used as cases for the research
- Prepared 1st progress report
- Designed instruments and collected data using surveys and focus group discussions. The focus is on 2 grass root level administration units (Kebeles)
- Analyzed the data, compiled interim findings and presented them (as 2nd progress report) in the mid-term workshop in June 2007 in Mauritius

² E-local governance is defined as the application of ICTs to transform the business of government and to enable the broad inclusion of citizens in public management, public service delivery and democratic participation at the local level.

- Conducted focus group discussions
- Organized a multi-stakeholder consultative workshop where the research project was presented and discussions held on partnerships beyond the first phase of LOG-IN Africa
- Developed an e-local governance functional model tailored to Kebeles of the CGAA
- Developed a prototype system (KLESS – Kebele life-event service system) as a showcase for future life event services implementation at the CGAA Kebeles.
- Presented the overall findings in the final LOG-IN-Africa workshop held in Cairo on 3rd-4th June 2008
- Presented a paper in the LOG-IN Africa e-Local Governance International Conference in Cairo, Egypt on 5-6 June 2008

Kenya

- Customized the Pan-African conceptual and methodological framework to suit the Kenyan project
- Completed 1st progress report
- Developed data collection instruments, piloted them and used the revised instruments to collect data collection in Mavoko and Nyeri Municipal Councils
- Analyzed the data, compiled interim findings and presented them (as 2nd progress report) in the mid-term workshop in June 2007 in Mauritius
- Collected additional data using focus group discussions
- Held a national stakeholders' workshop in Nairobi to discuss the preliminary findings and their policy implications
- Article accepted and published in the proceedings of the 1st International Conference on Theory and Practice of Electronic Governance, Macao, China, 10-13 December 2007
- Presented the overall findings in the final LOG-IN-Africa workshop held in Cairo on 3rd-4th June 2008
- Presented a paper in the LOG-IN Africa e-Local Governance International Conference in Cairo, Egypt on 5-6 June 2008

Mauritius

- Assessed Local Authorities web sites and made preliminary investigation of computerization systems projects implemented in Municipal Councils in Mauritius, leading to choice of Municipal Councils and E-government applications for the research project
- Completed 1st progress report
- Customized the Pan-African conceptual and methodological framework to suit the Mauritius project
- Developed instruments and research methodology for data collection and analysis
- Contacted and built partnership with stakeholders and organized national roundtable involving stakeholders to validate preliminary findings and results and to revise instruments and research methodology
- Carried out data collection through interviews and field observations in three municipalities
- Analyzed the data, compiled interim findings and presented them (as 2nd progress report) in the mid-term workshop in June 2007 in Mauritius
- Compiled and submitted the 3rd technical progress report
- Article accepted in European Conference on E-government, Ecole Polytechnique, Lausanne, Switzerland, 10-11 July 2008

- Held a round table discussion involving the stakeholder in May 2007
- Organized policy dissemination workshop and essay competition on e-local governance for the purpose of raising awareness.
- Presented the overall findings in the final LOG-IN-Africa workshop held in Cairo on 3rd-4th June 2008
- Presented a paper in the LOG-IN Africa e-Local Governance International Conference in Cairo, Egypt on 5-6 June 2008

Morocco

- Deployed e-government portal that provides, among other things, government and governance related information as well ICT tools, GIS maps, to promote local tourism, and hence local socio-economic development
- Installed and deployed networking infrastructure in Larache and Ksar Kebir pilot BEC offices
- Prepared 1st progress report
- Improved the BEC application system. The big improvement work included the conceptual model, architecture, the e-services enabling, and the graphic user interface
- Deployed the new version of BEC application in the BEC pilots
- Conducted series of site visits to meet and talk to the BEC personnel in the 2 BEC pilots to be automated
- Conducted the BEC training
- Deployed the BEC application handling back office digitization operation
- Compiled the 2nd progress report and presented it in the mid-term workshop in June 2007 in Mauritius
- Article accepted and published in the proceedings of the 1st International Conference on Theory and Practice of Electronic Governance, Macao, China, 10-13 December 2007.
- Conducted series of formal meetings / workshops with Larache decision makers and the central government officials
- Conducted series of site visits & field work to access the IT infrastructure and to facilitate contact with Larache stake holders
- Re-built the ICT automation platform by migrating to OpenSource system (eFEZ. V.2), performed data validation and enabled features for accuracy and quality printouts.
- Implemented and tested an experimental data center for web based BEC services) in collaboration with an American private company.
- Deployed interconnection between data center and the selected 2 BEC offices. The interconnection is currently being tested.
- Presented the overall findings in the final LOG-IN-Africa workshop held in Cairo on 3rd-4th June 2008
- Presented a paper in the LOG-IN Africa e-Local Governance International Conference in Cairo, Egypt on 5-6 June 2008

Mozambique

- Carried out field survey of electronic land registration and land management information system projects to obtain preliminary information, such as, the case description, the stakeholders involved at the different levels, information about the places (departments, organizations, etc) where the systems are implemented, and indicators to be evaluated

- Customized the Pan-African conceptual and methodological framework to suit the Mozambique project
- Completed 1st progress report
- Developed data collection instruments and used the instruments to collect data collection in two provinces in Mozambique
- Analyzed the data, compiled interim findings and presented them (as 2nd progress report) in the mid-term workshop in June 2007 in Mauritius
- Presented the overall findings in the final LOG-IN-Africa workshop held in Cairo on 3rd-4th June 2008
- Presented a paper in the LOG-IN Africa e-Local Governance International Conference in Cairo, Egypt on 5-6 June 2008

South Africa

- Customized the Pan-African conceptual and methodological framework to suit the South Africa project
- Completed 1st progress report
- Analyzed websites of the various Gauteng province local governments
- Organized a workshop with officials who either work for Gauteng municipalities or work on local governments at a provincial level. The purpose of the workshop was to expose them to the research project, test their reactions to the project and to share lessons and insights on local e-governance
- Compiled the 2nd progress report and presented it in the mid-term workshop in June 2007 in Mauritius
- Collected additional data using semi-structured key informant interviews with key stakeholders in municipalities, analyzed data from RIA's South Africa ICT household survey and compiled and submitted a third progress technical report.
- Planning a consultative national workshop with stakeholders before compiling the final report.
- Presentation on the website rationale and review at the INFOS 2007 in Cairo, 24th –26th March.
- Presented the overall findings in the final LOG-IN-Africa workshop held in Cairo on 3rd-4th June 2008
- Presented a paper in the LOG-IN Africa e-Local Governance International Conference in Cairo, Egypt on 5-6 June 2008

Uganda

- Customized the Pan-African conceptual and methodological framework to suit the Uganda project
- Completed 1st progress report
- CAFRAD discontinued the services of the Team Leader due to non-performance and is still waiting for him to submit documentary evidence to account for the expenditure of the 30% that was disbursed on contract signature.
- A new contract was signed and a new Team Leader appointed. The new Team Leader has constituted a new team and the team has re-customized the Pan-African conceptual and methodological framework.

- Developed tools for data collection, collected data and compiled and submitted a 2nd technical progress report with preliminary findings and a policy brief.
- On-going follow-up data collection and analysis before preparation of the final report.
- Presented the overall findings in the final LOG-IN-Africa workshop held in Cairo on 3rd-4th June 2008
- Presented a paper in the LOG-IN Africa e-Local Governance International Conference in Cairo, Egypt on 5-6 June 2008

3. Research Findings

The LOG-IN Africa Research Network has produced research findings. The key findings are based on the e-governance roadmap framework that was developed and is shown in Annex 2. The findings are outlined below.

3.1 Enabling Effects of National Context

Our research found that the national context was generally enabling to e-Local governance in all countries. One of the enabling contexts was that all the countries had recognized the importance of local governments in national socio-economic development and had developed a governance policy that was enshrined in certain laws and regulations, including national constitutions. The degree of autonomy of the various levels of local governments varied, depending on the degree of implementation of the governance policy in a country. In general, we found that governance policy was inextricably tied to legislative reform and that it was either in the process of being developed or reformed. The implementation of this policy was generally slow and incomplete in all countries (except in Kenya where it had stalled (Mitullah and Waema, 2007)) with a lot of power, resources and responsibilities still vested in the central government. This incompleteness in policy implementation may partly be explained by the great amount of restructuring associated with implementing a governance policy and the attendant resistance; the length of time it takes to implement a decentralization policy, including enacting the necessary pieces of legislation; and the intense politics that decentralization often evokes.

The interesting point to make here is that despite the lack of or incompleteness of the decentralization policy, local governments in the various countries were still able to implement relatively successful e-Governance initiatives. This implies that it is possible to implement e-Governance without necessarily having a decentralization policy. That is, decentralization policy is not a necessary condition or even a panacea for effective e-Governance. We instead argue that a conducive context for e-Governance needs to exist, and decentralization policy is just one of contexts. An illustration is Kenya where there is no decentralization policy or even a local government strategy but there was a relatively successful implementation of an integrated financial management system in the two local authorities studied. A number of policy initiatives together created an enabling governance context for implementation of the e-Local governance initiative (LAIFOMS). This context was composed of the report of the Commission of Inquiry of LAs in Kenya in 1995 and the concept paper on empowerment of LAs, the policy initiatives contained in the budget speeches of 1997/1998 and 1998/1999, the Kenya Local Government

Reform Programme (KLGRP) focusing on improvements in financial management in LAs, the fiscal transfer through LATIF and the results-based management and associated performance contracting as part of public service reform (Waema and Mitullah, 2008). In addition, the national development plan, Economic Recovery Strategy, played a significant role in creating an enabling strategy context. At the implementation level, other context came into play to ensure success, including leadership and championship of the initiative by the KLGRP in the Ministry of Local Government and committed champions in the local authorities.

In most countries, e-Local governance systems were being implemented as part of public service reform. In some countries, e-Local governance initiatives were driven by local government reform programmes, which is part of the wider public service reform. In Kenya and Mozambique, for example, devolution of power, resources and responsibilities to the lower levels of government was driven by local government reform programmes in the ministries in charge of local government (Mitullah and Waema, 2007; Macueve, 2007). In others, there was mismatch. In Uganda for example, the implementation of LoGICS and DistrictNet preceded the draft e-Governance strategy while in Kenya the implementation of the integrated financial management system preceded the e-Government strategy of 2004 but guided by local government reforms (Asingwire et. al, 2007; Mitullah and Waema, 2007). In some of the countries, the e-Local governance initiatives were guided by the national ICT policy. This is the case in Uganda where LoGICS was certainly guided by the National ICT Policy of 2002 (Asingwire et. al, 2007). This is also the case in Egypt. In other countries, the e-Local governance initiatives were guided by national e-Government strategy, such as in Mozambique.

Another context that enabled e-Local governance was the recognition of ICT as critical or strategic resources in national development and the existence of national ICT policy and e-Government strategy in all countries (except in Ethiopia where the both are in draft form). In most countries, the planning and/or implementation of the e-Governance policy and strategy was vested in an agency or unit in an appropriate ministry. The relevant ministry varied from country to country. Examples include Ministry of Capacity Building in Ethiopia; Information and Communication and Office of the President in Kenya; IT and Telecommunications in Mauritius; ICT in Uganda; and Ministry of State for Administrative Development in Egypt.

A further enabler of e-Local governance was the explicit alignment between the national ICT policy and governance that existed in most countries. For example, the Egyptian Information Society Initiative (EISI) emphasized the decentralization of service delivery in government by providing multiple communications delivery channels and service provision centers (Fahmy et. al, 2007). EISI also aimed at realizing three major outcomes; raising productivity, reducing cost, and efficient allocation of resources. Another example is in Kenya where the national ICT policy aims at redefining the relationship between government and citizens with the objective of empowering them through increased and better access to government services (Mitullah and Waema, 2007). A final example is in Mozambique where two key goals of the national ICT policy are “to raise the efficacy and efficiency of public and private services” and “to improve governance and public administration” (Macueve, 2007).

Similarly, the link between e-Government strategy and governance was clear in most countries. In Kenya, for example, the 2004-2007 e-Government strategy was aimed at efficiently delivering

government information and services to the citizens, encouraging participation of citizens in government and empowering all citizens (Mitullah and Waema, 2007). Another example is in Morocco where the e-Government policy focuses on online access to public information and services and the automation of the workflows of public administrations. The aim is to improve governance by increasing the transparency, effectiveness, and speed of public administrations in processing citizens' requests (Kettani, 2007). A final example is in Mozambique where the key objectives of e-Government strategy are to improve efficiency and effectiveness in the delivery of public services, to ensure transparency and accountability of government, and to provide access to information to improve business and simplify citizens' lives (Macueve, 2007). Needless to say, the e-Government strategy must be aligned to the national ICT policy. In most of the countries, it was evident that the e-Government strategy was derived from the national ICT policy. It was only in Kenya where the first e-Government strategy preceded the national ICT policy (Mitullah and Waema, 2007).

A final context that enabled e-Local governance was the isolated cases of successful implementation of e-Government projects. One of the key projects rolled out in most countries is the development of an ICT backbone infrastructure linking central government ministries, effectively creating a government intranet. There was however no country that had rolled this infrastructure in all ministries or all levels of local government. In all countries, ministries and government departments had created websites to provide public information and online services and provided senior officers with e-mail accounts. In some of the countries, some of the larger and/or more progressive local governments had followed suite. All countries had begun to computerize some priority business applications, such as customs, citizen or civil registration, electoral registration, tax management, financial management, land management, human resource management and so on, depending on the priority sectors of each country. However, these projects created isolated sectoral systems or databases. Work had started in some of the countries (e.g. Egypt) to integrate these systems. The projects, although varied in scope and success in implementation, had created an awareness of the role of ICT in development and created usage of ICT in government that had in turn created a readiness for e-Local governance systems. The projects had also formed useful lessons that can be drawn on in the implementation of e-Local governance systems.

The above enabling contexts can be considered to be the necessary conditions, at the national level, for the e-Local governance roadmap. Table 2 below shows a summary of these necessary conditions as derived from the LOG-IN Africa research.

Table 2: Necessary conditions for e-Local governance roadmap

Necessary conditions at the national level

- ◆ Existence of a governance policy
- ◆ Recognition that ICT are strategic resources in national socio-economic development
- ◆ E-Local governance linked to and implemented as part wider public service or local government reforms
- ◆ Alignment of e-Government strategy to the national ICT policy
- ◆ Appropriate government agency or unit in charge of ICT
- ◆ Successful pilot implementations of e-Government projects

3.2 Constraining Effects of National Context

Despite the enabling context as outlined above, our research found challenges that existed at the national level that constrained or could potentially constrain the realization of e-Local governance. We will here focus on the key and common challenges.

- (a) **ICT infrastructure.** This is in terms of both the limited penetration of the infrastructure in central and local governments and households as well as the poor quality of the infrastructure. As an example, Mauritius, which has one of the highest rating (e.g. by ITU) on most ICT indicators in Africa, less than 18% had access to Internet from their homes as at 2006 (Central Statistics Office, Mauritius, ICT Report 2006). A further example is in South Africa where only about 4% in Gauteng province had a working Internet connection at home (Abrahams and Reid, 2007).
- (b) **E-Government strategy.** In most countries, e-Government strategies did not address local government and there were no e-Government policies/strategies at the local government level³. In Kenya, for example, the existing central e-Government strategy did not explicitly address local governments and e-Government initiatives at the local level were guided by a local government reform programme (Mitullah and Waema, 2007). A further example is in South Africa where there was no e-Government policy framework at either national or provincial government level (Abrahams and Reid, 2007a). A final example is the case of Mozambique where e-Government strategy was not known by many in local governments and the implementation of e-Government projects at this level was guided by a national e-Government strategy (Macueve, 2007). This demonstrates an apparent disconnect between policy/strategy level in central government and local level in e-Government project implementation and the need to promote and publicize e-Government strategy and projects to all levels of government through various media channels. This disconnect was found between the e-Government strategy and the national ICT policy. This was the case in Kenya where the e-Government was developed ahead of the national ICT policy. This was also the case in Ethiopia where the national ICT policy has remained in draft form until it became irrelevant.

³ The only exceptions were the large city councils in the more developed economies of South Africa and Egypt. These tended to have their own e-government strategies.

- (c) **Centralization.** A lot of power was still vested in central government in most countries. In Egypt, for example, although local authorities have a certain degree of administrative authority, they were still financially and politically managed by the central government. A further example is in Kenya where local governments have very limited autonomy and rely quite significantly on central government, especially for funding and financial management (Mitullah and Waema, 2007). A final example is Morocco where there is a high degree of centralization of financial management (Kettani, 2007).
- (d) **Financial resource allocation.** There was inadequate budget allocation to local governments in national planning in most countries. In Kenya, for example, the government only allocates 5% national income tax to local authorities. In addition, there was insufficient financial resource allocation to ICT at the national level in all countries. For example, in Morocco, which is a Lower Middle Income Country and has a Medium Average ICT opportunity index as shown in table 1 above, the ICT budget is less than 1% of total government operational budget (Kettani, 2007). This inadequacy in financial resource allocation in turn affected budget allocation to ICT at the local government level.
- (e) **Cost of ICT equipment and services.** Most countries, e.g. Kenya and Uganda, have ICT universal access/services policy and/or strategy to enable underserved and marginalized communities to have easily accessible, available and affordable ICT infrastructure and services. However, our study found widespread unavailability of ICT infrastructure and relatively unaffordable ICT equipment and services. This means that local government cannot provide e-services while citizens are unable to have online access to local government information and services and have online interactions. In Kenya, for example, another study (Waema et. al, 2007) found that cost of dial-up Internet access, which is the lowest entry level for Internet access, was 233% of the gross national income (GNI). In South Africa, some municipalities have acquired a class license from the regulator to operate electronic communication networks for commercial purposes (ECA, 2006). This can be attributed to the failure of the universal service and access agency (USAA) to provide universal access/service to underserved areas and disadvantaged households (Abrahams and Reid, 2007b). Whether these municipalities will be able to provide local communities with affordable broadband ICT infrastructure and services and readily provide e-services remains to be seen.
- (f) **Coordination.** There was ineffective or poor coordination in e-Government implementation. For example in South Africa, there was lack of support from institutions that have been set up to address and facilitate ICT penetration (e.g. universal service and access agency (USAA)) and by implication e-Government (Abraham and Reid, 2007b).
- (g) **Others.** Other challenges were the lack of adequate basic ICT skills at all levels of government, uncoordinated ICT investment, lack of integration of existing systems, lack of political will for e-Government, and the relatively low relevant local research and human capacity in e-Governance.

The above constraining contexts can be considered to be the obstacles, at the national level, for the effective implementation of e-Local governance. Table 3 below shows a summary of the above obstacles and others derived from the LOG-IN Africa research.

Table 3: Obstacles to effective e-Local governance implementation

Obstacles at the national level
<ul style="list-style-type: none"> ◆ Limited penetration and poor quality of the national government ICT infrastructure ◆ e-Government strategy not addressing local governments ◆ Not promoting and publicizing e-Government strategy and projects at all levels of government ◆ Inadequate basic ICT skills at all levels of government ◆ Inadequate financial resource allocation to local governments and to ICT ◆ Incomplete decentralization of government ◆ Inadequate implementation of universal access to ICT ◆ Poor coordination in e-Government implementation ◆ Lack of political will

3.3 Local Government Context

In this sub-section, we shall outline the context of e-Governance at the local government level. In summarizing the local government context, we provide a summary of the e-Governance findings from the preliminary findings. We also synthesize the key issues/challenges in implementing e-Local governance systems that are emerging from the research.

3.3.1 Summary of e-Local Governance Findings

Early results indicate that local governments in most of the countries had recently started implementing e-Government applications, often lagging behind the implementation of e-Government in central government. In two of the countries (Ethiopia and Senegal), the e-Government applications being studied had not been automated while in another three (Kenya, Morocco and Mozambique), the applications being studied were the pioneer e-Government systems at the local government level. In almost all countries where e-Government applications had been implemented, the local governments had created the necessary local area networks, Internet connectivity and web presence. However, from an e-Government perspective, the focus had predominantly been on e-administration.

There were **both positive and negative effects of e-Local governance on good governance**. In Kenya, for example, the implementation of the financial system (LAIFOMS) in the two municipal councils was fairly successful in realizing positive good governance outcomes in

responsiveness, accountability, transparency and efficiency and effectiveness. One of the key explanations for this is a supportive policy context. Although Kenya does not have a decentralization policy, there were a number of policy initiatives that together created an enabling governance context for implementation of LAIFOMS. This context was composed of the report of the Commission of Inquiry of LAs in Kenya in 1995 and the concept paper on empowerment of LAs, the policy initiatives contained in the budget speeches of 1997/1998 and 1998/1999, the KLGRP focusing on improvements in financial management in LAs, the fiscal transfer through LATIF and the results-based management and associated performance contracting as part of public service reform. In addition, the national development plan, Economic Recovery Strategy, played a significant role in creating an enabling strategy context (Waema and Mitullah, 2008).

It is however interesting to note that LAIFOMS was fairly successful even without an explicit e-government strategy at either the ministerial or local government levels. Perhaps the multiplicity of governance initiatives provided a strong enough drive for the LAIFOMS programme could explain this outcome. The researchers suspect that the success of LAIFOMS implementation would have been much higher if there had been an explicit ministerial ICT strategy, with the e-local governance initiatives tightly linked to this strategy (Waema and Mitullah, 2008).

Another example is Morocco where the implementation of a civil registration e—Governance system in Fez and Larache has had phenomenal success. It has obliged and convinced Morocco's decision makers of the merit and need to replicate in several local governments, including Marrakech, Essaouira, Midelt, Casa, Taza, Jerada, Mekness, and Sefrou (Kettani, 2008).

A final example is Mozambique, where the implemented e-Government systems (Land Management Information System (LMIS) and GovNet) had minimal effects on participation, responsiveness and efficiency and effectiveness, the good governance constructs that were the focus in this study. One of the key reasons was that implementation of the e-governance systems was very poor and that it was too soon to assess the e-governance outcomes. For example, with respect to effects on efficiency and effectiveness, informants said that "... it was too soon to say something regarding the outcomes of the systems. As a matter of fact, while the original idea of LMIS and GovNet was to replace the old set of systems by integrating all functionalities in one system, there were still many systems being used in parallel with LMIS. Such systems include ARCGIS to digitize the maps, systems to control the payment of the use of land, systems for introducing land tenures, and systems to control other taxes related issues. In addition users of LMIS in Beira and Pemba expressed that the new system was duplicating the work, because they were entering data in two systems, the manual and the electronic one. In addition, staff still used yahoo and hotmail addresses instead of using GovNet addresses for communication" (Macueve and Nhampossa, 2008).

At the same time, there were other challenges that contributed to producing this rather negative result, including the limited skilled human resources in the implementation of such projects, lack of local departments to deal with ICT issues in general, the high costs of ICT equipment, the country's expansiveness influencing in the construction of the network and management with scarce resources, and deficient infrastructure in other provincial capitals apart from Maputo (Macueve and Nhampossa, 2008).

Secondly, **championship of the e-Local governance implementation** was in some officials in central government in several countries. In Kenya, Uganda and Mozambique, it was clear that the e-Government implementation at the local government level was still driven or championed by the central government. In Uganda, for example, respondents from both Higher and Lower Local Governments mentioned that LoGICS was a “ministry (of Local Government) thing”, implying that it was planned and its implementation directed from central government (Asingwire, et. al, 2007). It is still possible to have successful e-local governance implementation even with central government leadership. However, in the case of Uganda, the successful implementation of LoGICS from a governance perspective was compromised by the lack of promotion of the implementation. As reported by the researchers, “... a big proportion of the potential users of LoGICS did not understand it; some reported to have only heard about it. Citizens, political and technical leaders at the HLG and LLG were largely unaware or had little knowledge of the operation and benefits of LoGICS” (Asingwire et. al, 2008).

Thirdly, in four countries, the **technical quality of the implemented e-Local government systems was deemed to be unsatisfactory**, ranging from poor systems implementations to inability of the systems to interface with other e-Government systems. In Uganda for example, the system functionality for LoGICS is not adequate to generate detailed information that can be directly used for planning and decision making while forms do not conform to the related modifications to do with the functionalities. In addition, the system could not be interfaced with other systems in government (Asingwire, et. al, 2007). Another example is in Mozambique where the network infrastructure was either poorly installed and/or very poorly maintained. For example, the Provincial Directorate of Agriculture in Pemba and Beira had installed Internet but it only worked for some months and never again. Staff were therefore forced to rely on Internet cafes and other available internet sources to be communicate. One notable characteristic of e-Governance implementation at the local level in most countries was the general lack of business process re-engineering (Macueve, 2007).

The interim results further show that a few local governments had moved to **providing services and information to their key stakeholders electronically (e-services) through their web portals**. However, this move faced challenges in most countries. In Morocco, for example, the government portals did not into account the socio-economic and cultural characteristics of the target users in terms of language, literacy and ICT knowledge. This tended to indirectly enhance e-exclusion (Kettani, 2007). In South Africa, our study found that the web content was generally presented in English while Gauteng province had four official languages. At the same time, some of the content was difficult to understand, not up-to-date, and was poorly written and irrelevant (Abrahams and Reid, 2007b). In most countries, the provision of information through the web portals was in most cases frustrated by the poor state of e-readiness of most local governments and the local community. This state of e-readiness was characterized by, among others, poor penetration of the ICT infrastructure, limited access to the Internet at the household level and low level of ICT literacy among the local community members.

In local governments that had web presence, the websites were at the publishing stage of the staged e-service content development model (Chan, C. M. L., et al., 2007) or stage I (emerging) of United Nations in the e-Government readiness (United Nations, 2008). In this stage, the focus

is on rolling out informational content, which is largely static, such as the procedures and guidelines for the various public services offered by the respective government agencies. Only in the city of Johannesburg in South Africa was there on-line services. This would be expected in other big cities, e.g. Cairo. Hardly any local government had moved to achieve electronic interactions between government actors and civil society (e-society).

Finally, our interim results show that most local governments **relied heavily on external consultants and/or contractors to provide a host of ICT services** (e.g. maintenance of ICT systems) due to lack of in-house technical capacity. This was deemed to be very expensive.

3.3.2 Key Challenges

The key challenges have been grouped into themes, which are outlined below.

e-Governance strategy. Although e-Government strategies existed at the national level, these did not adequately address the local government level. In almost all the countries where e-Government systems had been or were being implemented at the local government level, there was therefore no guiding e-Governance or e-Government strategy at the local government level. It was only in the highest levels of local government (large City Directorates in South Africa, Egypt and Ethiopia) where there were e-Governance strategies at that level.

E-readiness. The e-readiness of most local governments that were studied was low. The key issues leading to this state include the lack of technical ICT human capacity (Ethiopia, Kenya, Uganda and Mozambique); low ICT literacy and usage (Ethiopia, Kenya, Mauritius, Mozambique, South Africa and Uganda); lack of ICT units or functions (Ethiopia, Kenya, Mozambique, Morocco, South Africa and Uganda); little or no access to ICT infrastructure (Ethiopia, Mauritius, Morocco and Uganda); limited, slow or inexistent Internet connectivity (Ethiopia, Kenya, Mauritius and Uganda) for both staff of the local authority or the community.

ICT funding. There was inadequate financial resource allocation to ICT in most countries (Ethiopia, Kenya, Mozambique, Senegal and Uganda). Although this could be considered as part of poor e-readiness, it is an important issue in its own right as nothing can be meaningfully be achieved without financial resources.

Human resources capacity. In addition to lack of technical ICT skills mentioned under poor e-readiness, most local governments did not also have the requisite managerial ICT skills in-house. In addition, they lacked the training programmes to create a sustainable pool of staff with the basic ICT literacy, technical and managerial skills. The key consequence of this was the use of external consultants and contractors (Kenya, Mozambique and Mauritius), who make e-Governance roll-out very expensive.

Institutional governance structure. There were no institutional governance structures in most local governments studied. In South Africa, for example, there was no institutional framework to drive e-Governance in the municipalities at the national and regional levels. The metropolitan municipalities would typically employ Chief ICT Officers (CIOs) who would be part of Executive Management. In comparison, the smaller municipalities would employ IT managers or

directors, who would not be strategic and thus cannot influence ICT direction (Abrahams and Reid, 2007b). In the other countries, local governments did not to have either an ICT structure or staff. ICT issues in these countries tended to be handled by management or the appropriate departments, depending on the initiatives being implemented. In the Kenya case study, for example, the accounting function was responsible for the roll out of the integrated financial management system in both municipal councils (Mitullah and Waema, 2007). The status of ICT staffing and institutional governance structure in the local authorities in the various countries is a reflection of the stage of ICT development at that level of government.

Business processes. Business process re-engineering has been identified as critical in e-Government implementation. In almost all the countries, business processes had not been re-designed before e-local governance systems were implemented. This is one of the reasons why Egypt, one of the leading states in Africa with respect to e-Government, chose a business process mapping project in LOG-IN Africa.

Change management. Change management has been identified in literature as one of the key challenges in e-Government implementation. In our research, resistance to change associated with e-Government implementations was found in Egypt and Mauritius.

Cost and affordability. The high cost of training and the high cost of ICT equipment Mauritius and Mozambique respectively, were a great challenge to implementation of the e-Government systems studied. From a consumer perspective, a different study in Kenya (Waema et al., 2007) found that Internet was relatively unaffordable to enable e-access. More specifically, average dial-up Internet cost was 233% of the gross national income (GNI).

4. Project Implementation and Management

Most national projects involved researchers studying the effects on local governance of the implementation of specific applications of e-government. Most of these types of studies were using case studies and structured surveys as research methods. Other methods that were used to compliment these are participant observation, documents review, key informant interviews and focus group discussions. The other key type of research involved the implementation of a specific application of ICT or model in local government contexts. In this case, the researchers participated in the implementation and at the same time evaluated the effects these ICT systems or models have on governance. They are chiefly using participatory action research methods.

One of the most significant changes that occurred in the project implementation was the change in management. Before the June 2006 methodological workshop, there were four people involved in the management of the project: the Project Leader/Research Network Coordinator, Research Director, Research Network Administrator and Research Associate. After the workshop, a decision was taken to change the management as follows:

- Stop the services of both the Project Leader/Research Network Coordinator, and Research Director and instead seek the services of one person to replace both. The new person was engaged in September 2006 as the Project Leader/Research Network Coordinator
- Retain the services of the Research Network Administrator
- Abolish the position of Research Associate and terminate the services of the person who had been engaged on this post

This change effectively halved the number of people involved in managing the project (from four to two). This change constituted a significant interruption to the LOGIN project activities, leading to inordinate delays ranging into months. A further major change in the project took place during the Team Leaders' meeting⁴ held in Kampala in November 2006. The change was that the Team Leaders' agreed to use the savings realized from the significant reduction in management and from other activities that had not taken place to fund the following:

- Facilitation of peer reviews
- Facilitation of the members of the Scientific Advisory Committee
- Regionally-organized capacity building activities
- Final international conference for dissemination of research results
- Occasional technical support for the Research Network Coordinator
- National priorities, including national capacity building and organization of additional stakeholder workshops

A related change was the transformation of the governance organs of the project. The Team Leaders' meeting in Kampala resolved to merge the Project Management Team (PMT) with the Project Management Committee (PMC) and call it the latter. The meeting also resolved to

⁴ This meeting was not in the project plan but was necessitated by the change in management. It was funded by savings in the methodology workshop.

include a representative of the Team Leaders in the PMC. This change had no financial implications.

At the national level, there were changes that are worthy mentioning. One is that the Team Leader of the Ugandan project indicated that he was not going to be answerable to the Research Network Coordinator after the changes in management. Observations are that this Team Leader has effectively dropped out of the project. The Project Management Committee terminated the services of the Team Leader appointed the Associate Team Leader as the new Team Leader and gave him the power to re-constitute the project team.

The new Team Leader created a new team, dropping one of the team members and bringing in a new person. This meant many delays but eventually the new team caught up with the rest by the end of the project. CAFRAD drew up a contract with the new Team Leader and his team reflected in the contract. CAFRAD requested the previous Team Leader of the Ugandan project to account for the first payment of 30%. In order for this accounting not to delay the new team, the Research Network Coordinator, in consultation with IDRC, decided to move some money from the Peer Review budget line in order to have the contract sum as 100% (CAD55,000 equivalent) and not 70%.

In Ethiopia, the Team Leader stepped down after he left the University to start a new job in another institution. His deputy, who was most active member of the team, took over the team leadership. Finally, a significant change was the termination of the contract for the Senegal project. The contract was terminated because the Team Leader constantly and systematically refused to revise and update the mid-term report as per the comments given by the Scientific and the Network Research Coordinator. In addition, there were doubts on the level of implementation of project activities on the ground and the Team Leader refused a field visit from the peering country and from an IDRC representative in Dakar. By terminating the contract, CAFRAD was under no obligation to make any further payments as this is clearly stipulated in the contract; “Payments will be settled only after satisfactory delivery of contract outputs....”.

The activities supported under the project are shown in the project schedule in Annex 6. All the activities in this schedule were completed in 2008. An extension has been approved by IDRC to enable the pending activities to be completed. They were completed in 2009 except the publication, launch and dissemination of the e-Local governance book.

The final financial report is submitted separately.

5. Project Outputs and Dissemination

The outputs that have been produced to date are summarized in the table below:

Activity	Output produced
1. “Kick off” of LOG-IN Africa Research Network and establishment of a website to manage & coordinate the Network	<ul style="list-style-type: none"> ▪ Start-up of activities and establishment of a pan-African “open” Research Network on ICTs for Local Governance achieved ▪ Establishment of the LOG-IN Africa Research Network ▪ The LOG-IN Africa Web Site and Virtual Research Platform (www.loginafrica.net) ▪ Establishment of management and coordination organs (Management & coordination team and Project Management Committee)
2. Start up of National Research Projects	<ul style="list-style-type: none"> ▪ Contracts with all National Research Teams ▪ Plans of actions for all National Research Teams
3. Deeper analysis of the state of ICTs and Local Governance in the selected countries	<ul style="list-style-type: none"> ▪ National research proposals ▪ Revised plans of actions of national research projects
4. Preparation of draft Assessment Methodology, including a set of indicators for discussion	<ul style="list-style-type: none"> ▪ Integrative “outcome assessment” framework and set of methods for Network level data collection and analysis
5. First e-discussion on Assessment Methodology	<ul style="list-style-type: none"> ▪ Report and Analysis of the 1st e-Discussion Forum on Assessment Methodology
6. LOG-IN Africa methodology workshop in Tangier, Morocco, to discuss the Assessment Methodology	<ul style="list-style-type: none"> ▪ Report of the LOG-IN Africa Methodological Workshop
7. Delays due to changes in project management	<ul style="list-style-type: none"> ▪ Contracts for new Research Network Coordinator and Research Network Administrator
8. Refinement of the Assessment Methodology and Set of Indicators	<ul style="list-style-type: none"> ▪ Pan-African Local E-Governance conceptual and methodological framework
9. Implementation of National Research Activities, including the application of the Assessment Methodology to Research Activities and training of researchers for data collection	<ul style="list-style-type: none"> ▪ Customized Pan-African conceptual and methodological framework to suit national projects ▪ First progress report of National Research Projects, containing customized conceptual and methodological framework ▪ Data collection tools for individual National Research Projects ▪ Mid-term review reports of the National Research Projects

Activity	Output produced
	<ul style="list-style-type: none"> <li data-bbox="824 231 1323 304">▪ 3rd technical progress reports of the National Research Projects <li data-bbox="824 304 1396 378">▪ 4th and final technical progress reports of the National Research Projects <li data-bbox="824 378 1274 415">▪ International conference papers <li data-bbox="824 415 1356 445">▪ A report of the 2nd e-discussion forum

Annex 4 shows the publications for LOG-IN Africa outputs as at December 2009.

Other outputs are shown in Annex 5. These are a summary of the e-governance context in the various countries and the development outcomes in accordance with the good governance outcomes framework.

6. Capacity Building

The following is an outline of the capacities that have been built in the various countries:

Egypt

- A lab was established at FCI to serve as project office. The lab is equipped with 3 PCS, 3in1 printer/scanner/photocopying, and a network. These IT equipments were supplied by MSAD.
- The Research assistants had their skills and knowledge increased with respect to: research methods, e-government, and process modeling.

Ethiopia

- The national research team is composed of people from ICTs and Social Science domains. The team normally conducts literature review as part of its research methodology, and has devised mechanisms on knowledge transfer; knowledge gained from literature review by a teammate imparted to the rest of the team members through brainstorming sessions, which are regularly held in every meeting.
- The Ethiopian team considers the paring of teams for peer review as another opportunity to build national team capacities and the recommended or anticipated site visits of each other is one we are considering as a very good opportunity to beef up the team's capacity

Kenya

- The project is working with a computer science / information systems postgraduate student, who is undergoing initiation in local governance and ICT. The normal practice at the University is to encourage such a student to continue into a Ph.D. programme in the same area, which the team is doing. This will however require both human and financial resources.
- The Project Assistant got skills that enabled him to get a consultancy job to evaluate an e-government project in the Ministry of Education
- One of the key capacities that has been built is the collaboration between a researcher in an ICT faculty (School of Computing and Informatics) and a researcher in governance (Institute for Development Studies). The Team believes that this marks the beginning of further researches in ICT and governance in both public and private sector. Perhaps an interdisciplinary centre for ICT and governance could be born out of this collaboration.
- Build additional capacity on use of Skype for communication with other researchers and on electronic tools for discussion and collaborative writing with other researchers separated by distance and time.

Mauritius

- Coaching and supervision of Research Assistant on regular basis
- One informal training session on ICTs for local governance carried out with 27 students in order to get understanding for carrying out the consumer survey for Mauritius
- Raised awareness on the role of ICT in local government through the roundtable discussions with ICT stakeholders in local e-government
- Capacity of University of Technology, Mauritius to handle an internationally funded research project enhanced
- Bridging of gap between the University and the world of practice (stakeholders involved in ICT in local government)

- Development of the University of Technology, Mauritius as a focal point for research in local government and above all in local e-government/governance
- Realization that it is possible to rally all stakeholders round a table to identify problems and develop solutions which cut across local government bodies. Researchers have realized how to get public officers and representatives from private sector and even NGOs to make meaningful contributions during meetings by coming fully prepared and documented
- Provided UTM staff with an opportunity to undertake further research work
- Ability to do research in groups improved
- Insight in peering and role of peer experienced

Morocco

- Larache project was equipped with a viable IT and networking infrastructure to be effectively used in governance
- The province allocated a reasonable fraction of each year's budget to equip the local government with ICT infrastructure and the related training programs. Such ICT use will transform governance practices and tools.
- Larache local government acquired and adopted a context sensitive e-Government system electronically enabling BEC service delivery
- Larache project personnel upgraded their respective skills and acquired new skills in network installation and maintenance
- Peer training initiation was very useful in building local capacities

South Africa

- The workshop with the municipalities was an initial step in capacity-building
- The LINK Centre designed a one-week course entitled Information and Communications Technologies for Development: ICT for Managers in Local Government (IT for non IT managers) after a request by the Ekurhuleni metropolitan municipality. The course was presented to a cohort of 20 municipal officials between 11 and 19 June 2008. The course curriculum includes some of the key literature relating to local e-governance, as well as a full session on the eGovernance for Social and Local Economic Development report of the LOGIN Africa project. The design and presentation of such new courses contributes to the long-term sustainability of the research organisation, namely the LINK Centre
- One avenue for follow-up is the Gauteng Management Development Programme which runs an annual training programme for the senior managers of provincial government

Uganda

- The LoGICS based research study has succeeded in contributing to the understanding of the software and its utilization. The research has unearthed design gaps and called for action from the Government. It has shown technical capacity gaps at all levels of the local government including at the centre.

7. Impacts and Outcomes

The project has had a number of development impacts. Firstly, almost all national projects created multi-disciplinary teams composed of engineers/computer scientists and social scientists to research e-governance. Their interactions have enhanced capacities for e-governance in the respective research institutions. Further, the Egypt, Ethiopia, Kenya and Mauritius project teams have established working relationships with the agencies in charge of e-government initiatives. We expect these relationships to grow and to help in influencing e-governance in those countries. Finally, the fact that some of the researchers are members of the national e-government policy and strategy structures/forums (e.g. Mauritius and Egypt) means that LOG-IN Africa projects will continue influencing e-governance policy and strategy in those countries.

Specific examples of impacts include:

- ◆ Ethiopia. The efforts of the Ethiopian team to establish a multi-stakeholders partnership resulted in the City Government of Addis Ababa to launch a program entitled “Information Communication Technology for Communities”, aiming at strengthening the capacity of the Kebele Administrations by means of using ICT tools.
- ◆ South Africa. Even with the limited interaction with the government, interest has been expressed by the government in understanding their own strengths and weaknesses with respect to e-governance and its impacts on social and local economic development. In addition, the workshop influenced the greater co-ordination of e-governance across all municipalities of Gauteng and the adoption of e-governance leadership role by the provincial Department of Local Government. The latter was achieved by proposing that the manager responsible for co-ordination and support to local governments adds e-governance to his/her portfolio. Finally, there are opportunities to influence the current range of strategy documents being prepared regarding municipal and provincial level strategies for e-governance, social and local economic development.
- ◆ Kenya. The E-government Directorate in Kenya has started collaborating with the School of Computing and Informatics, University of Nairobi, in thinking about the approach to e-government planning and implementation. In addition, the Project Assistant got skills that enabled him to get a consultancy job to evaluate an e-government project in the Ministry of Education. In addition, the Kenyan Project Team Leader has been requested to lead a team to review the existing national e-Government strategy and develop the next five-year national e-Government strategy. This strategy will have a very strong component of e-local governance, an issue that was discussed and agreed with the top e-Government and public sector reform bosses during the June 2008 conference. In addition, the IDRC Programme Officer in charge of the project has been requested by the e-Government Director to sit on the reference committee for the development of the e-Government strategy.
- ◆ Morocco. The achievements achieved in LOG-IN Africa project (e-Fez and e-Larache) have become examples that other city and provincial governments are keen to replicate. This project has won three awards: UNPSA award, eMTIAZ 2006 and Africa’s 2007 TIGA award.

- ◆ Mauritius. As a result of the roundtable discussion, momentum has been built among ICT stakeholders in the local e-government sector to adopt ICT for more value added services, for instance to get local government services online. The final national workshop on policy dissemination on e-Local Governance was attended by Minister of Local Government, Local Authorities Chief Executives, IT Officers and High Level Delegation from the Government of Uganda led by Mr. S.Purmessur from Ministry of Local Government Mauritius, Secondary Schools Students and IT Education Officers. This event was extensively covered by the Mauritius Broadcasting Corporation (TV).

Many national workshops to discuss the final findings and implications for policy took place towards the end of the project. We expect these workshops to lead to some impacts, which cannot be observed during the life of the project given its short duration. However, specific outcomes were observed, and these could lead to impacts. The following are the key LOG-IN Africa outcomes that were included in the Acacia Research Network Outcomes 2006-2009:

- (a) In Morocco, the municipal governments of Fez and Larache voted in favour of budgets to implement an electronic civil registration system. As a consequence, they received further support from the respective municipal governments for ICTs in general. They obtained an increased budget for ICTs, which was to support the implementation of the registration system as well as the development of ICT in the municipalities. No budget had been allocated for ICTs before the introduction of the civil registration system.

The implementation of a civil registration e-governance system in both Fez and Larache has had phenomenal success. It has obliged and convinced Morocco's decision makers of the merit and need to replicate in several local governments, including Marrakech, Essaouira, Midelt, Casa, Taza, Jerada, Mekness, and Sefrou.

- (b) The city government of Addis Ababa launched a program called "ICT for Community" which organized and sponsored the training of employees representing 55 'kebeles,' the smallest administrative unit of the Ethiopian government. These employees received training on basic computer applications.

The demonstration with the prototype on the computerization of life events registration (that is, the registration of significant events in the life of a person from birth to death, including marriage) convinced the City of Addis Ababa's government that computerization was important. The LOG-IN research team had sensitized the city government to the fact that it was important to offer basic ICT training before the computerization of life events registration.

- (c) In Kenya, Prof. Waema was requested to lead a team to review the existing national e-government strategy and develop the next five-year strategy. This strategy borrowed a lot from the LOG-IN e-local governance roadmap and had a very strong component of e-local governance, an issue that was discussed and agreed with the top e-government and public sector reform bosses during the June 2008 conference.

In addition, IDRC Program Officer Edith Adera had been requested by the e-government director to sit on the reference committee for this exercise.

- (d) In South Africa, the LINK Centre designed a one-week course entitled “Information and Communications Technologies for Development: ICT for Managers in Local Government (IT for non IT managers)” following a request by the Ekurhuleni metropolitan municipality. The course was presented to a cohort of 20 municipal officials between 11 and 19 June 2008. The course curriculum included some of the key literature relating to local e-governance, as well as a full session on the *e-Governance for Social and Local Economic Development* report of LOG-IN Africa’s South African project⁵. The design and presentation of such new courses contributes to the long-term sustainability of the research organisation, namely the LINK Centre, which hosts the South African research.
- (e) In 2006, the University of Nairobi’s Institute for Development Studies (IDS) entered into the first collaboration with the School of Computing and Informatics, which has led to joint supervision of doctoral students in ICT4D.

After this project, several other collaborative projects were created. One of the latest involves the collaborative supervision of a PhD student by the Institute for Development Studies and the School of Computing and Informatics (the supervisors are the researchers who worked on LOG-IN Africa in Kenya). This collaboration will increase research capacity in ICT4D at the University of Nairobi. Other results are collaboration on ICT and poverty (the PICTURE project) that is on-going between the School of Computing and Informatics and the Institute for Development Studies.

- (f) In 2008, one of the members of the Mauritius node of LOG-IN was invited to participate in the e-regulation project committee, a key national e-government project which aims to enable 117 business permits to be applied for and received on-line. As far as business facilitation is concerned, the following components of the project have been identified:
- Simplifying Business Licensing Procedures;
 - Improving Access to Commercial Justice;
 - Improving Land Title Registration Services;
 - Extending the Credit Reference Bureau to Improve Access to Finance; and
 - Streamlining the Legal Framework for Business.
- (g) The business processing mapping methodology (BPM) and tool developed by LOG-IN Africa’s Egyptian team was adopted, which means that the Ministry of State for Administrative Development (MSAD) plans to use the BPM tool developed to model business functions of other e-government projects. The initial adoption

⁵ *e-Governance for Social and Local Economic Development: Gauteng City Region Perspective*, LINK Public Policy Research Paper No. 9, November 2008, www.link.wits.ac.za/papers/eGov4SLED-s.pdf

involved the ministry in charge of local government accepting to test the BPM methodology and tool in e-government projects. Furthermore, MSAD committed to provide funds for further development of the methodology and tool as long as IDRC provided additional funding for the second phase of LOG-IN Africa. This commitment was made publicly by the minister when he opened the International Conference on e-Governance organized by LOG-IN Africa in Cairo in June 2008.

- (h) LOG-IN Africa's Ethiopian team developed a prototype system to computerize the 'life events' registration (registration of all of a person's life events from birth to death) in local governments as part of their research work. The City Government of Addis Ababa was a key partner from the beginning. The Ethiopian team sought the City Government's permission to develop a pilot on life events computerization, discussed with them the results of the prototype, and shared the results of the research and demonstrated the prototype at the national workshop.

After the LOG-IN project came to an end, the City Government requested the source code (computer program) and manuals so that they could start implementing the system. The City officials also requested the LOG-IN Ethiopian team to upgrade the prototype into an operational system ready for implementation, which the team did for free. The new operational system has been installed in one of the kebeles (the smallest administrative unit in Ethiopia) and data entry was on-going as of October, 2009. It is hoped that the Ethiopian LOG-IN team can further contribute if phase II of LOG-IN Africa's research is funded by IDRC.

- (i) The LOG-IN Africa Team Leader was invited to share LOG-IN Africa research at high-level policy and research meetings between 2007 and 2009. Some of the key meetings include:
- Egypt as a presenter in the international INFOS conference organized at Cairo University in 2007;
 - China as a paper presenter in the first international conference on e-Governance in 2007;
 - Canada to present LOG-IN research work to a visiting Haitian ministerial delegation to Canada in Ottawa in 2007;
 - Kenya as a presenter in an East African e-Government forum for local governments in 2007;
 - Ethiopia as a presenter in the IFIP World IT Forum 2007 (WITFOR 2007) in 2007;
 - Uganda as a presenter in a Commonwealth Telecommunications Organisation (CTO) e-Government forum held in conjunction with the Uganda's Ministry of ICT in 2008;
 - South Africa as an external keynote speaker in the GovTech conference organized by the State Information Technology Agency (SITA) in 2008; and
 - Brazil as a key note speaker in the V South American Conference in Science and Technology applied to Electronic Government – CONeGOV in 2009.

In addition, LOG-IN Africa researchers have published in peer-reviewed journals and had papers accepted, through a peer review process, for presentation at respected international conferences such as the ones listed above. In total, over 30 peer-reviewed journal and conference papers from LOG-IN research work have been published.

As an example, the GovTech conference organized by the State Information Technology Agency (SITA) in 2008 wanted the results of LOG-IN shared with the South African e-Government stakeholders. Another example is the CTO e-Government forum in Kampala which was interested in sharing the results of the LOG-IN research with policy makers from African governments. Furthermore, the following papers were published in peer-reviewed journals:

1. Waema, T.M. (2009). E-local governance: a case study of financial management system implementation in two municipal councils in Kenya, *International Journal on Electronic Governance (IJEG)*, 2 (1), 55-73.
2. Waema, T.M., Mitullah, W. and Adera, E. (2009). Research in African e-Local Governance: Outcome Assessment Research Framework, *African Journal of Science, Technology, Innovation and Development (AJSTID)*, 1(1),227-256.
3. Macueve, G.(2008). E-government for Development: A Case Study from Mozambique, *African Journal of Information Systems*, 1(1): 1-17.
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5. Prof. Driss Kettani Moulin, B., Gurstein, M. and Asmae El Mahdi (2008). E-Government and local Good Governance: A Pilot Project in Fez, Morocco, *The Journal on Information Systems in Developing Countries , EJISDC*, 35, 1, 1-8.
6. Prof. Driss Kettani Michael Gurstein, and Asmae Elmahdi (2008). eFez Good Governance Outcomes in a Developing World Context, *The Journal of Community Informatics*, Vol 4, No 2 (2008) Special Issue: E-Governance and Community Informatics.

We believe that the research results shared in the numerous fora and the papers published in academic journals and conference proceedings have helped influence policy and strategy in e-Government planning and implementation, as well as influenced research on e-governance.

8. Conclusions and Recommendations

The main output of the research is the e-local governance roadmap. The conclusions from the roadmap can be summarized as the need to:

- ◆ Develop an e-Governance strategic direction that is aligned to the wider governance reform programme and the national development plan and cascade this direction to the local government level.
- ◆ Develop the good governance outcome indicators for e-Governance projects to be implemented as part of project planning using the framework shown in a separate annex.
- ◆ Re-engineer the business processes for the priority e-Governance projects to be implemented using a specific business process mapping methodology, such as that developed by the Egyptian team.
- ◆ Roll out the e-Governance projects using the four-stage framework described in a separate annex.
- ◆ Use the good governance outcome indicators to monitor and evaluate the implementation of the e-Governance projects.
- ◆ Ensure participation of policy makers and citizens in all the above activities.

We recommend that the whole or elements of the proposed roadmap be tried by various countries.

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Kettani, D. (2007). Larache e-Government Project. LOG-IN Africa Mid-term Review Report.

Macueve, G.A. (2007). Evaluating the Outcomes of e-Government Projects in Mozambique: A Case Study of Maputo, Sofala and Cabo-Delgado Provinces. LOG-IN Africa Mid-term Review Report.

Mitullah, W. and Waema, T.M, (2007). ICTs and Financial Management in Local Authorities in Kenya: Case Study of Mavoko and Nyeri Municipal Councils. LOG-IN Africa Mid-term Review Report.

Waema, T.M., Kashorda, M. and Kyalo, V. (2007). Internet Market Analysis Study Final Report. Communications Commission of Kenya, May 2007.

Annex 1: National Projects Research Problem/Questions and Objectives

Country	Research problem or questions	Research objectives
1. Egypt	<ul style="list-style-type: none"> ▪ What is the proper methodology to model services delivery processes in African Countries? ▪ How can such a methodology help in better matching between the field experience and the computerized systems developed? 	<ul style="list-style-type: none"> ▪ To develop a methodology that properly document all aspects of service delivery business processes and to build associated software tool that facilitates the use of the developed methodology
2. Ethiopia	<ul style="list-style-type: none"> ▪ What is the level of ICT usage for local governance purpose at the Kebeles' of the CGAA? ▪ What is the e-local governance readiness status of the Kebeles' of the CGAA? ▪ How can the application of ICTs on local governance bring the participation of citizens into a higher level? ▪ What policies and strategies are needed for the application of ICTs on local governance at the Kebeles' of the CGAA? ▪ What are the key factors and drivers that impact the successful implementations of e- local governance at the Kebeles of the CGAA? ▪ What is the reaction of the Kebele staff and end-users to the governance aspects in the implementation of the prototype developed? 	<ul style="list-style-type: none"> ▪ To identify the key drivers/factors for successful implementation of e-local governance in the local administrative systems, "Kebeles" of the CGAA ▪ To identify policy and strategy-related issues for successful implementation of e-local governance ▪ To propose a roadmap for an effective implementation of e-local governance at the Kebeles of the CGAA ▪ To identify priority areas on life-event services where ICTs intervention is required ▪ To develop a prototype system that serves as a showcase on the application of ICT on local governance
3. Kenya	<ul style="list-style-type: none"> ▪ Poor financial management and engagement of citizens in council affairs 	<ul style="list-style-type: none"> ▪ To investigate the scope, usage, successes and challenges of the automation of the financial management function in the local authorities ▪ To study the influence of the automated financial management system on internal organizational processes ▪ To investigate the effects of automated financial management system on access to information, service delivery and interactions with stakeholders
4. Mauritius	<ul style="list-style-type: none"> ▪ 	<ul style="list-style-type: none"> ▪ Assess the effectiveness and the effects of ICTs at Municipal level in terms of: <ul style="list-style-type: none"> ○ administrative level ○ service delivery level ▪ Identify the stumbling blocks to the implementation of ICT in Local Authorities in terms of: <ul style="list-style-type: none"> ○ supply side barriers ○ demand side barriers ▪ Propose solutions and make policy

Country	Research problem or questions	Research objectives
5. Morocco	<ul style="list-style-type: none"> ▪ What political, social and economic strategies will need to be adopted and what are the outcomes of deploying a local e-Government portal for a medium-sized city (Larache) offering citizen-oriented services? ▪ What are the differences and similarities to the IDRC-funded e-Fez project and what can be learnt from this that would be of interest for wider e-Governance implementations? 	<p>recommendations based on research findings</p> <ul style="list-style-type: none"> ▪ To work on “Action” related project objectives, which involve design, conceptualization, the development, implementation and deployment of technology related outputs. Specifically, the project intends to implement an e-government portal for Larache, Morocco. ▪ To work on “Research” related project objectives; specifically investigating ways to generalize ICT4D projects in Morocco, developing outcome assessment framework to generate knowledge on successes (and failures) of e-Local governance initiatives, and finally elaborating a practical roadmap to assist in successfully building e-Local governance projects based on the learning of eFez and Larache project
6. Mozambique	<ul style="list-style-type: none"> ▪ To what extent has the use of ICTs improved good governance at the local level in Mozambique? 	<ul style="list-style-type: none"> ▪ To analyze the e-land registration system and the electronic government network ▪ To identify the opportunities that these projects have to offer ▪ To identify the challenges and problems of implementation faced by these projects ▪ To identify the outputs and outcomes brought by these projects for the users and organizations ▪ To draw recommendations of the implementation of these projects ▪ To draw the national roadmap for e-government implementation based on the study of these projects ▪ To contribute the design of the Login-Africa roadmap of e-local governance in Africa
7. South Africa	<ul style="list-style-type: none"> ▪ Is there alignment between e-government initiatives and social and local economic development objectives? ▪ Do these initiatives promote the selected good governance characteristics of strategic vision, responsiveness and transparency? 	<ul style="list-style-type: none"> ▪ To establish the social and local economic development objectives of each selected municipality ▪ To establish what e-governance is taking place within the selected municipalities ▪ To assess whether these initiatives reflect the municipalities S/LED objectives ▪ To assess whether they promote the three selected principles of good governance
8. Uganda *	<ul style="list-style-type: none"> ▪ How has the application of LoGICS promoted citizen participation in local governance? ▪ How has the application of LoGICS improved transparency in local governance? ▪ How has the application of LoGICS affected efficiency and effectiveness in service delivery at the Higher Local Government and Lower Local Government? ▪ What are the outcomes (lessons and issues of policy) of 	<ul style="list-style-type: none"> ▪ To assess the contribution of ICTs to better service delivery among local governments, specifically investigating the effects of LoGICS on the good governance constructs of participation, transparency, efficiency and effectiveness.

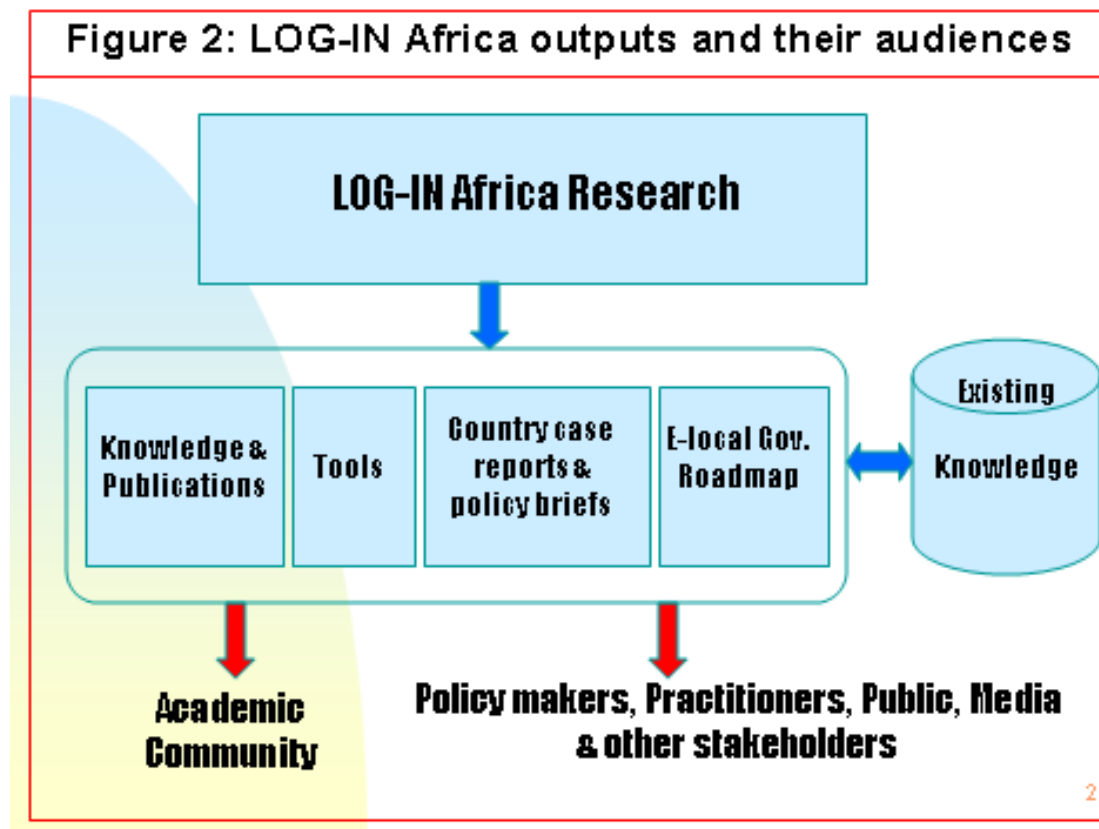
Country	Research problem or questions	Research objectives
	implementing LoGICs so far?	

Key:

* These countries have refined their research questions or research objectives since the submission of their first technical progress reports.

Annex 2: A Framework for Developing the LOG-IN Africa e-governance Roadmap(s)

The key outputs of the Network are shown in figure 2. The figure also shows the key audiences for these outputs.



Introduction to “Roadmap”

- One of the key aims in LOG-IN Africa is to develop a “Roadmap for e-Local Governance in Africa”
- It is a synthesis of the experiences and research findings of the individual national project
- It is supposed to be at quite a high level of generality
- It is aimed at sensitizing and informing national governments, multilateral agencies, and local authorities as well as civil society concerning broad guidelines for future investment and development in this area
- It includes guidelines and recommendations for project implementation in such areas as ICT infrastructure, software, training, policy and institutional requirements, service delivery, citizen participation, monitoring and evaluation, etc.

The table below shows an organizing framework for developing LOG-IN Africa e-local governance project implementation roadmaps.

Question	Outline description	Key elements of the roadmaps
1. Where are we?	Involves an assessment of the existing e-governance situation at the national and local government levels	National level <ul style="list-style-type: none"> ▪ E-governance policy ▪ E-government policy and strategy ▪ Legal and regulatory framework ▪ Challenges Local government level <ul style="list-style-type: none"> ▪ ICT infrastructure ▪ ICT human capacities ▪ Effects of e-government projects on good governance ▪ Expectations of stakeholders ▪ Challenges
2. Where do we want to go?	An expression of what African countries should aim to achieve with respect to e-local governance in the longer term	<ul style="list-style-type: none"> ▪ Strategic intent ▪ Goals
3. How do we get there?	The strategies, action plans, methodologies and tools that should be taken to accomplish the strategic intent and goals	<ul style="list-style-type: none"> ▪ E-local governance plans <ul style="list-style-type: none"> ◦ Strategies ◦ Outcome indicators ◦ Targets ◦ Resources ▪ E-local governance development tools ▪ E-local governance implementation methodologies
4. What practical steps must we take to get there?	The pre-requisites for successful implementation of e-local governance projects at national and local government levels and step-by-step guidelines for implementing e-local governance projects	National level <ul style="list-style-type: none"> ▪ Pre-requisites, including e-governance/e-government policy, legal and regulatory framework, etc. Local government level <ul style="list-style-type: none"> ▪ Pre-requisites ▪ Step-by-step guidelines (or roadmap) for implementing e-local governance projects (based on lessons learned & best practices from literature) on: <ul style="list-style-type: none"> ◦ E-local governance strategies ◦ Institutional structures ◦ Project planning and management ◦ Business processes ◦ Change management ◦ ICT infrastructure ◦ ICT human capacity building
5. How do know we are getting there or not?	Monitoring and evaluating the implementation of e-local governance projects	<ul style="list-style-type: none"> ▪ E-local governance outcome assessment framework

Annex 3: Financial Report

See a separate Final Financial Report.

Annex 4: Publications and Dissemination Forums

Journal Papers

- 1) Waema, T.M., Mitullah, W. and Adera, E. (2009). Research in African e-Local Governance: Outcome Assessment Research Framework, African Journal of Science, Technology, Innovation and Development (AJSTID), 1(1), 227-256.
- 2) Waema, T.M. (2009). E-local governance: a case study of financial management system implementation in two municipal councils in Kenya, International Journal on Electronic Governance, 2 (1), 55-73.
- 3) Macome, E., Macueve, G. (2007). E-government for Mozambique: Challenges and Opportunities, e-Governance in Developing Nations, Mishra S., Mukherjee A. (Eds), India, Hyderabad, 167-188.
- 4) Ms. Gertrudes Macueve. (2007/2008). E-government for Development: A Case Study from Mozambique, African Journal of Information Systems, 1(1): 1-17.
- 5) Ms. Gertrudes Macueve. (2007/2008). E-government Implementation in Mozambique: Transferring Lessons across the Public Sector, Paper accepted in the South African Computer Journal.
- 6) Macueve, G., Manjate, J., Ginger, L., Gaster, P., Macome, E. (2009). Women's Use of ICT in Mozambique: A Tool for Empowerment?, African Women and ICTs: Investigating Gender and Empowerment (book edited by Buskens, I. and Webb, A.)
- 7) Ms. Gertrudes Macueve. Assessment of the Outcomes of e-Government for Good Governance: A Case of Land Management Information System in Mozambique, International Journal of E-government (IJEG) 1(4).
- 8) Dr. Hisham M.E. Local e-government maturity in Egypt: An Exploratory Evaluation, Egyptian computer science journal, 30(3), 80-89.
- 9) Prof. Driss Kettani, Moulin B., Gurstein M., Asmae El Mahdi. E-Government and local Good Governance: A Pilot Project in Fez, Morocco, The Journal on Information Systems in Developing Countries , EJISDC, ISSN: 1681-4835, 35(1), 1-8.
- 10) Prof. Driss Kettani, Michael Gurstein, Asmae Elmahdi. eFez Good Governance Outcomes in a Developing World Context", The Journal of Community Informatics, 4(2),(2008) Special Issue: E-Governance and Community Informatics.

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- 1) Waema, T.M. (2009). e-Governance Evaluation: Towards an Integrated Outcome Evaluation Research Framework, in Proceedings of the LOG-IN Africa e-Local Governance 1st Conference, June 5-6 2008, Cairo, Egypt, ISBN 978-9981-1-1062-0, pp. 1-13, Editions Marocaine et Internationale (EMI), Tangier, Morocco.
- 2) Waema, T.M. and Mitullah, W. (2009). e-Governance in Local Authorities in Kenya: Policy and Institutional Elements of Implementation, in Proceedings of the LOG-IN Africa e-Local Governance 1st Conference, June 5-6 2008, Cairo, Egypt, ISBN 978-9981-1-1062-0, pp. 67-78, Editions Marocaine et Internationale (EMI), Tangier, Morocco.
- 3) Prof. Timothy Waema. A Conceptual Framework for Assessing the Effects of E-government on Governance, 1st International Conference in Computer Science and Informatics, 5-7 February, 2007, Nairobi, Kenya.
- 4) Prof. Timothy Waema. A Conceptual Framework for Assessing the Effects of E-government on Governance, Paper in Proceedings of the 1st International Conference in Computer Science and ICT, COSCIT 2007, Nairobi, Kenya, 5th – 7th February, 2007, ISBN: 9966-7284-0-6, pp. 98-103.
- 5) Prof. Timothy Waema. LOG-IN Africa research project and research framework, The fifth INFOS International Conference, LOGIN Africa projects, 24-26 March, 2007, Cairo, Egypt.
- 6) Prof. Timothy Waema. LOG-IN Africa research project and interim findings, ICT Impact on Municipal Service Development: Towards E-Government, 18-20 June, 2007 Ankara, Turkey.
- 7) Prof. Timothy Waema. About LOG-IN Africa Network Project ; Research framework and interim findings, World IT Forum (WITFOR) 2007, 21-24 August, 2007 Addis Ababa, Ethiopia.
- 8) Prof. Timothy Waema. Implementation of integrated financial management system in Nyeri and Mavoko Municipal Councils, Regional eGovernment Forum for Local Authorities, Nairobi, October 24-26, 2007.
- 9) Prof. T.M. Waema, Prof. W.V. Mitulla. E-governance and Governance: A Case Study of the Assessment of the Effects of Integrated Financial Management System on Good

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- 10) Prof Timothy Waema, Lucienne Abrahams, Dr. Hatem ElKadi. A Closer Look at E-Government in Africa, International Conference INFOS2007, Cairo, Egypt.
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- 17) Ramessur S., Chitto H.B., Durbarry R. (2008). Assessing e-service Delivery in Mauritius: The case of Revenue Management System, Proceedings of First International Conference, Cairo, Egypt 5-6 June 2008 pp 89-100.
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- 19) Mr. John Gasu. Uses of ICTs for Political Inclusion and Good Governance in Northern Ghana, Final and international dissemination workshop, June, 2008.
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- 21) Dr. Asingwire Narathius, Mr. Christopher Muhoozi, Mr Angeyo. ICTs in Local Governance a case study of the local government Information Communication System (LOGICS) in Uganda, Proceedings of First International Conference of LOG-IN Africa, Cairo, Egypt 5-6 June 2008 pp 117 – 125.
- 22) Dr Solomon Atnafu, Dr Dessalegn Mequanint, Mr. Adal. e-Local Governance: A Case Study on life-event services in the Kebeles of the City Governments of Addis Abba, Proceedings of First International Conference of LOG-IN Africa, Cairo ,Egypt 5-6 June 2008, pp 157 – 169.
- 23) Kettani, Driss, Asmae El Mahdi. Implementing E-Government Accessible to Illiterate Citizens, ICTD2009 proceedings.
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- 29) Dr. Hisham M.E. Abdelsalam, Dr. Hatem ElKadi. ICT to Enhance Administrative Performance: A Case Study from Egypt, Proceedings of the 1st International Conference on Theory and Practice of Electronic Governance (ICEGOV2007), Macao, China, Dec. 10-13, 2007, pp. 129-132.

- 30) Dr. Hisham M.E. Abdelsalam, Dr. Hatem ElKadi. ICT to Enhance Administrative Performance: A Case Study from Egypt, Proceedings of the 1st International Conference on Theory and Practice of Electronic Governance (ICEGOV2007), Macao, China, Dec. 10-13, 2007, pp. 129-132.
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- 34) El-Kadi, H., Abdelsalam, H. M., El-Naggar, N. A Multi-Perspective Model for e-Government Projects: The Case of e-Alexandria, OICC 9th International Scientific Symposium: ICT Impact on Municipal Service Development, Towards E-Government, Ankara, Turkey, 18-20 June 2007.

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- 1) All LOGIN teams. National stakeholder workshops, with policy briefs (most appearing in national newspapers, radio and TV), Different times in 2007 & 2008.
- 2) Dr. Hatem Mohamed. LOG-IN Africa Egypt project.
- 3) Ms Luci Williams. LOG-IN Africa South Africa project.
- 4) All LOGIN national teams. Mid-term review workshop, 6-10 June, 2007, Mauritius.
- 5) Prof. Aly Aly Fahmy. LOG-IN Africa Egypt project and interim findings.
- 6) Houda Chakiri, Aboubacar Diarra(2007). eFES and its replication at Larache, ICT Best Practice Forum 7 - 9 June 2007, Ouagadougou, Burkina Faso.
- 7) Kettani, D., Asmae El Mahdi. The 7th International UN Forum on Innovation in Public Sector, Vienna, Austria, June 24-28 2007.
- 8) Kettani, D., Asmae El Mahdi. eFES Success Story, InnovMed special meeting on the “Network of Innovators in Governance in the Mediterranean Region” Organized by (UNDESA).
- 9) Prof. Driss Kettani. LOG-IN Africa Morocco project and interim report on e-Larache.

- 10) Kettani, D., Asmae El Mahdi. Increasing Trust in Local Government Leadership by Providing On-line services: the e-Fez initiative, 2007 UNPSA Winner, innovation Workshop, held during the UN 7th Global Forum.
- 11) Asmae El Mahdi. eFES replication at Larache towards ICT diffusion in North Africa, CePRC e-Government Study Program 2007.
- 12) Asmae El Mahdi. eFES Replication at Larache, the League of Arab States Youth Forum on Youth Participation in Localizing and Achieving the MDGs, November 19-22, 2007, Ain Soukhna , Egypt.
- 13) Kettani, D., Mohammed Alaoui Titna. eFES experience, presented at the 11th General Conference held by the Organization of Islamic Capitals and Cities (OCVI)), June 18-20, 2007 at Ankara.
- 14) Kettani, D. eFES experience, presented at the TIGA Award Ceremony, Addis Ababa, Ethiopia, April 2007.
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- 19) Asmae El Mahdi. Back Office Integration Issues in Developing Country Context: Lessons Learned from a Case Study in Morocco, the 2nd International conference on Theory and Practice of Electronic Governance ICEGOV2008Cairo, November 2008: Cairo, Egypt.
- 20) Dr. Kettani, Asmae El Mahdi. eFES system DEMO, The 3rd IEEE/ACM International Conference on ICTs and Development(ICTD2009).

Annex 5: Other Outputs

5.1 e-Governance Context Summary

National e-governance policy (Egypt)

The Egyptian Information Society Initiative (EISI) (Egyptian Gov., 2008a) was formed in 2001. The initiative included seven tracks, and one of them was E-Government: Government Now Delivers. This track was launched as a program covering a multitude of projects and later on was transferred to the Ministry of State for Administrative Development in 2004 (Egyptian Gov., 2008b). EISI and the e-Government program are all components within the larger national framework for achieving better governance, both at the central as well as the local level, which resulted in accepting MSAD/Egypt as observer within the Public Governance Committee of The Organization for Economic Co-operation and Development (OECD)

Local governance system. Four key tiers of local government: Directorates, Cities, Districts, Neighbourhoods/Villages. Central ministries have “antennas” at the governorates level, called directorates. Directorates are technically managed by an undersecretary from the corresponding ministry, while the entire directorate (and the subordinate departments) report administratively to the local administration. The Ministry of Local Development overlooks the activities of the local entities, but has no power over them.

Central-local relations. LGs manage their operations based on rules, regulations and legal requirements created by the central government. They have a certain degree of administrative autonomy, nevertheless they are financially and politically managed by the central government. The degree of administrative autonomy is in how they provide their service to citizens and how they manage their processes. The personality and abilities of the governor are critical in using this relative autonomy to determine the performance of a LG

Decentralization policy. Administrative decentralization is being considered. This decentralization is being tested with the ministry of education, together with the governorate of Alexandria. Decentralization on the political and financial level is being discussed. Implementation of such level of decentralization would require complete restructuring of the government, to change from an executive body to a regulatory one

Legal framework (Egypt)

No clear literature on Legal Framework:

Local governments - represented in governorates - manage their operations based on rules, regulations and legal requirements created by the central government. However, they have autonomy in how they provide their service to citizens and how they manage their processes. Consequently, governorates might be organized in different ways. They, thus, have a degree of administrative autonomy, which when properly used can result in good administration, totally depending on the personality and abilities of the governor

National ICT policy

The Egyptian Information Society Initiative (EISI), (2005) Government program has the following policies pertinent to governance:

- Emphasizing public private partnerships
- Decentralization of service delivery by providing multiple communications delivery channels and service provision centers.
- Activating and encouraging data and information exchange among government bodies.
- Setting the legal and regulatory foundations required for authentication, electronic payment, and security
- Adopting intensive human resource development programs and incentive schemes.

National e-government strategy (Egypt)

Since 2003, championship of the Egyptian e-government program was transferred to the Ministry of State for Administrative Development (MSAD). The vision of the Egyptian e-government program was to establish an “effective government body capable of adapting to change (agile), efficiently plan and manages resources, provides distinguished services, and interacts with citizens

Among the objectives on the way to achieve this vision were: (1) providing excellent services to citizens, foreigners, businessmen and investors quickly, accurately, efficiently & effortlessly for both applicants and government staff, (2) enhancing government performance by using information & communication technology to develop work systems, simplify work procedures and exchange documents & information quickly, and (3) provide accurate, updated information for decision makers and investors to help them plan for the future and follow up the implementation of development projects, as well as evaluating the performance of government workers

e-local governance strategy (Egypt) No clear indications that there is a strategy in place.

Local government initiatives were set off in Egypt. Following the mandates of the MSAD, there were serious steps taken towards automating the work systems and reorganizing management systems in different ministries and governmental agencies.

Local government development project (LGDP) employs modern information technologies and state-of-the-art management systems to enhance both the quality and efficiency of government systems, reduce time, overcome corruption at the workplace leading to the overall development of Egypt. LGDP projects do not aim to fully automate the services, but rather to enhance the operations by ICT to reduce delivery time, and to establish a monitoring and control system that provides better transparency and equity.

e-readiness of local governments (Egypt)

The report does not discuss the level of e-readiness indicators like e-government/e-governance strategy, ICT infrastructure, Internet connectivity, ICT leadership/championship, technical ICT capacities, ICT literacy of personnel, computer-based MIS, website, ICT funding etc.

Ethiopia

National e-governance policy:

Local governance system. Ethiopia is divided into nine National Regional States and two Special City Administrations. The States are divided into Woredas (local administration districts), coordinated by zonal administrations. Woredas are considered and structured to be centers of decentralized system of the local governments with an average population of 100,000. Each Woreda is organized into several kebeles, the lowest administrative offices

Decentralization policy. The states, mostly organized on ethnic and language lines, enjoy great autonomy. In particular, the states can “formulate and execute economic, social and development policies, strategies and plans, administer land and other resources, levy and collect taxes”, etc. The decentralization process accords an important role to Woredas in the planning and decision-making processes. Measures are being taken to pave the ground to render Woredas the center of socio economic development. It is believed that the decentralization process will bring a lot of benefits since Woreda level officials will be more responsible for micro planning and monitoring and the actual implementation of programs. The Woredas are expected to be active in the provision of basic infrastructures such as setting up and administering schools, health facilities, roads, drinking water supply, agricultural development, etc.

Legal framework: Not indicated

National ICT policy (Ethiopia)

National ICT policy has been developed as a framework for the development of the sector. The thrust of the draft ICT policy is:

- ICTs recognized to be integral part of the national development plan;
- Enabling public administration organs, at the federal, regional and zone level to be connected into a comprehensive electronic service network;
- Exploit the opportunity of creating an informed decision making system to offer better services to citizens;
- Deployment of ICTs potentials in the education, health, finance, integrated rural development and agriculture sectors to bring broader socio economic impact;
- Making information accessible resources for public and private sectors.

The e-discussion document indicates that this ICT policy is still at the draft level, and has not been finalized.

National e-government strategy

In order to achieve the goals and objectives of the ICT policy, the **Government has expressed its commitment to steadfastly pursue strategies that are outlined in the policy (EICTDA, ICT4D, 2006)**. These include: designing service network systems that allow citizens and private companies to communicate with public authorities; setting up organizational structures for ICT at different levels of government; developing guidelines, procedures and organizational structures to ensure the integration of ICT in strategic public sector development programs; promoting the development of a competitive ICT sector; promoting and facilitating the participation of civil societies and communities in ICT development; designing and implementing computerized information systems and applications with emphasis on priority sectors; automating all public service delivery systems; establishing public information gateways; and strengthening

institutional capacity in government, educational institutions and in the private sector to deliver ICT services.

e-local governance strategy: No e-governance strategy in Kebeles

e-readiness of local governments

Both Kebeles have no Internet connectivity, and have no website of their own. A few computers are available at both Kebeles but they are not networked. The staffs of both Kebeles are not trained on Computer use. Regarding ICT funding, Kebeles have no other financial support to acquire and use ICTs other than the fiscal budget allocated to them from the sub-city, for their day-to-day activities.

Kenya

National e-governance policy

Local governance system. The Kenyan local governance system is composed of the Ministry of Local Government and the four tiers of Local Authorities (LAs), namely: Cities, Municipalities, Towns and County Councils. While the above legal bodies constitute Local Government in Kenya, the local governance framework in Kenya is broader than the LAs. It consists of provincial, district, location and sub-location administration with technical staff drawn from various ministries. Inherent in the gamut of Local Government and local governance system are various public and private institutions, including civil society organizations

Decentralization policy. Kenya has no decentralization policy that rationalizes power sharing, responsibilities, and resources between the central government ministries, parastatals, districts, LAs and the private sector. Since the beginning of the 1990s, there has been a deliberate attempt to decentralize governance by moving away from a centralized political system where citizens hardly make any contribution in governance of resources, to a decentralized political system where the inputs of citizens is considered critical to development. This has witnessed the review of the Constitution, which stalled, the review of the Local Government Act, which has been on hold pending the completion of the review of the Constitution as well as the review of various Acts of Parliament

Local Government Reform Programme. Despite lack of a decentralization policy, there is a Local Government Reform Programme, which became operational in 1996. The programme has three components: rationalizing central-local financial relations, improving LA financial management, including revenue mobilization, and strengthening citizen participation in planning and ownership of programmes. The reform programme has recognized the importance of LAs in enhancing economic governance, improving public service delivery, and increasing economic efficiency, accountability and transparency. A key instrument in reform process was the enactment of the Local Authority Transfer Fund (LATF) in 1998. The Act provides 5 per cent of national income tax to LAs in line with population, resource base and financial performance. In order to access LATF, LAs are administratively required to develop a Local Authority Service Development Action Plan (LASDAP) using a participatory approach. The LAs began accessing LATF during financial year 1998/1999. The requirement for a participatory development of LASDAPs has pushed LAs to involve their respective residents in their activities.

National E-government strategy

The current e-government strategy was developed in 2004 and was designed to achieve a set of goals and objectives, namely, to efficiently deliver government information and services to the citizens; to promote productivity among public servants; to encourage participation of citizens in government; and to empower all Kenyans in line with development priorities outlined in the 2003 – 2007 Economic Recovery Strategy for Wealth and Employment Creation. The strategy came to an end in 2007, and its achievements have been evaluated and a draft strategy for the next five years created. By the time of writing this chapter, the next e-Government strategy had not been officially sanctioned

Legal framework (Kenya)

Legal framework is listed as one of the challenges faced by LAs in realizing their mandate.

The Local Government Act is currently under review. In addition to the Act, the LAs draw their legal powers from the Constitution of Kenya, other Acts of Parliament, Ministerial Orders and By-Laws.

National ICT policy (Kenya)

The National ICT Policy was approved by the Cabinet in January 2006 and an ICT policy document published in March 2006. It highlights the overall goal of e-Government is to make the Government more result oriented, efficient and citizen centred. The policy gives the broad objectives of E-Government as:

- Improve collaboration between Government agencies and enhance efficiency and effectiveness of resource utilization;
- Improve Kenya's competitiveness by providing timely information and delivery of Government services;
- Reduce transaction costs for the Government, citizens and the private sector through the provision of products and services electronically; and
- Provide a forum for citizens' participation in Government activities.

e-local governance strategy

There is neither an e-governance nor an e-government strategy. E-government applications are driven by central government (Ministry of Local Government)

e-readiness of local governments

There are local area networks in the 2 LGs covering most offices with internet connectivity and websites which were launched in 2007. Financial management system is the only e-government application implemented in the two LGs. However, there is no ICT unit in both LGs and ICT is driven by the central government. There is lack of ICT staff in both LGs. Regarding ICT funding, there is very little funding. Both LGs are allocating a small proportion of their revenue to ICT, e.g. to purchase and maintain computer hardware.

Mauritius

National e-governance policy

Local Authorities fall under the responsibility of the Ministry of Local Government and Solid Waste Management

Local governance system. LG institutions comprise five municipal councils in the urban areas, and four district councils & 124 village councils in the rural areas.

The Local Government Act 2003 initiates effective decentralisation with a view to providing the Local Authorities with greater autonomy and responsibilities in development matters. Alongside it is expected to empower the local population so that they have a greater say in the management of the affairs of their respective region and also to restructure procedures to enhance efficiency in service delivery and accountability and more transparency in the day to day running of Local Authorities. It also requires local authorities to 'play a more proactive role in combating poverty, improving the quality of life, and developing appropriate structures for the promotion of sports, cultural and welfare activities' in their areas. However it has not been fully implemented yet and a new Local Government Act is being prepared to replace the 2003 one. This initiative follows the will of the government to transfer more autonomy to local authorities and allow community participation in local council's affairs.

National e-government strategy

The E-government Master Plan, which charts out strategies and action plans for the short, medium and long term for e-Government, was formulated in 2003. The objective is to set a roadmap towards a coherent and integrated approach to implement e-Government.

Legal framework

The Government has made a number of efforts in addressing the regulatory and legal framework for ICTs. Several bills have already been drafted. The Copyright Bill at the National Assembly was passed in July 1997. This bill will drastically reduce the legal challenges posed by the use of ICTs. For instance the Information and Communication Technologies Act 2001 lays out the institutional and procedural guidelines for the regulation and democratization of information and communication technologies and related matters (National Computer Board, 2003).

The Supreme Court heads the judicial system and has the power to interpret the constitution and to judge the constitutionality of legislation brought to its attention. The Head of State is the President who is elected by the National Assembly, whilst the Prime Minister is the Head of Government and he presides over the cabinet of Ministers, which is collectively responsible to the National Assembly for any action taken by one of its members.

National ICT policy

The National ICT Strategic Plan 2007-2011 of the government has five strategic trust areas namely providing support to legal, institutional and infrastructural framework related to ICT, promoting e-business adoption, accelerating ICT adoption in society, transforming the island into an ICT expertise hub in the region to take up leadership roles and finally becoming an investment nucleus for ICT.

e-local governance strategy (Not indicated)

e-readiness of local governments

All five Municipalities and four District Councils have their websites which provide general information on the services provided, the activities undertaken and information about the organisation structure. At the Pamplemousses and Riviere du Rempart District Councils citizens can send complaints online through an embedded feature in its web sites. In case of Municipality of Quatre Bornes the annual budget is accessible online. Almost every Local Authority has an IT section, which is headed by the Information Technology Officer and assisted by the Database Supervisor.

In 2002, the Municipality of Beau Bassin/Rose Hill set up an 'e-town' committee with the aim of gearing the Council towards becoming an 'e-town'. Coupled to this, the Council also has a cyber centre with 64 personal computers, meant to empower the less privileged children of the township with IT Skills. On the web sites of Quatre Bornes Municipality and Pamplemousses District Council citizen can also post 'upcoming events' or social programmes they are organising with date, time, venue and event descriptions as well as create their own email account. They can also give online feedback about web portal as well as cast their vote online for different opinion polls

The E-Business Plan for Local Authorities is a project with the objective of improving operational efficiency and service delivery by Local Authorities through the optimization of ICT. Implementation of the project in 4 pilot sites (Port Louis, Black River, Pamplemousses/Rivière du Rempart, Vacoas/Phoenix) was expected to be completed by February 2009 and replicated in all other Local Authorities by August 2009.

Morocco

National E-government policy.

Morocco's e-government policy focuses on two aspects: online access to public information and services as well as automation of the workflows of public administrations. The aim is to improve governance by increasing the transparency, effectiveness, and speed of public administrations in processing citizens' requests.

Decentralization policy. Decentralization policy started in the 1960s as a step towards the democratization of state institutions and an initiative to involve the population for the fulfillment of sound governance at the local level. The decentralization experience has gone through three main phases. The first phase, which lasted from 1960 to 1975, set up the legal framework regulating the institutions of local government. In this respect, the institutions of local government became legal entities. The second phase, which started from 1976 through 2003, gave the decentralized entities a great deal of financial and administrative autonomy and granted them a wide range of competences to deal with local socio-economic issues. The third phase started in October 2002. It was aimed to further develop the legal structure underlying local government entities (2003).

Local governance system. The communes are the lowest level of decentralization. The communal councils are responsible for providing public services, such as distribution of drinking water, distribution of electricity, sewage management, garbage collection, streetlights, and urban public transportation. They are also responsible for protecting the environment, managing sports

and socio-cultural centres as well as signing conventions of cooperation intended to foster local development. After independence, Morocco adopted a new administrative division that gave rise to provinces as intermediary entities between the central government and communes. They are the second level of decentralization. Provincial councils study and vote for provincial development action plans. The constitution of 1996 created the third level of decentralization: regions. The regional councils manage regional affairs and work towards promoting regional development. They are considered as major actors in fostering local development and essential partners in enabling socio-economic. These sub-government entities elect their respective councils that are in charge of managing their affairs democratically.

The decentralized entities are not fully autonomous. Rather, the functioning and actions of the local government institutions are shaped by various ministries. For instance, Ministry of Finance controls the municipalities' financial affairs. The Ministry of Interior has power over the administrative matters of the decentralized entities. Furthermore, the provision of many of the municipalities' services is determined by Ministries of health, water, education, etc.

National e-government strategy

There is a paragraph in the country report that Morocco's e-government national strategy aims, among other things, improvement of good governance conditions (eMaroc, 2006), but the e-government strategy is not discussed at length.

National ICT policy

There is a report on Morocco's experience with ICT policy for the last 10 years (1995-2007), "*Strategie e-Maroc 2010: Realizations, Orientations & Plans d'action, Reussir*" published on September 2007. This Strategy rests on two main strategic objectives:

- ◆ Reducing the digital divide towards "eInclusion" via 4 strategic areas of intervention :
 - developing a useful Moroccan content
 - making available functioning ICT infrastructure in affordable prices
 - enabling access to Information Society for all Moroccans
 - training in ICT adapted for all profiles

- Developing a productive, competitive, and export-oriented ICT industry to reposition Morocco at the international level via 4 strategic areas of intervention:
 - developing a productive, competitive ICT industry
 - developing an export-oriented ICT industry ("télé-services")
 - enabling access to Information Society for all Moroccans, specifically enterprises and companies specialized in ICT
 - training in ICT adapted for all profiles, specifically HR operating in enterprises and companies specialized in ICT

e-local governance strategy: (Not indicated)

e-readiness of local governments (The report refers to Googledocs for information)

Legal framework

Morocco's public administration managed to make some achievements. There have been large scale reforms, including the creation of the legal framework enabling training programs for public employees. In addition, there are reforms related to controlling the high wage bill.

The Moroccan Parliament adopted the 24-96 law on post and telecommunications, and hence, set up a liberal legal framework (Lengrand, 2004).

Judiciary power is independent from the legislative and executive powers, according to the constitution of 1996. There are various courts in Morocco with specific jurisdiction. Starting from 1997, the judicial power underwent transformations, including the creation of commercial courts as well as development of human Resources by offering judicial personnel with training programs

Mozambique

National e-governance policy

Local governance system. Local government in Mozambique began as part of the process of dismantling colonial state apparatus, immediately after national independence in 1975. The new Mozambican government replaced the colonial administrative structures and constructed a new system of governance at the national, provincial and local levels. At the beginning, it was a socialist system, characterized by a centralized administration where each and everything was planned and decided at the centre of political power in Maputo. Successive reforms have created several tiers of government: provincial, district, urban municipalities, local/rural councils, country authorities, etc administration.

Decentralization policy. Mozambique has been implementing a decentralisation policy that can stimulate democracy, policy equity and active people participation at local level through autonomous and democratically elected local government. These in turn enhance accountability, transparency and good governance. It is also expected that decentralization will increase management efficiency, as well as efficiency in financial performance through increased revenue generation and rational expenditure decisions and, that it will also provide a better environment for public private partnership. *(The status of decentralization policy implementation has not been indicated)*

National e-government strategy

The National e-government strategy was developed in 2004. The key objectives of the strategy are to improve efficiency and effectiveness in the delivery of public services, to ensure transparency and accountability of government, and to provide access to information to improve business and simplify citizens' lives.

Legal framework

In 1992, a Local Government Reform Programme (PROL) was set up. It aimed at reformulating the existing local government system, endowing local authorities with own legal status distinct from that of the state, and with administrative, financial and patrimonial autonomy. In 1997, the Mozambican Parliament approved Local Authorities Legislation, comprising of the legal and

institutional framework for Local Authorities (Law n.2/97, and Local Finances Law n.11/97). According to Law n. 2/97, the local authorities were established as population and territorial units, endowed with their representative (the Municipal Assembly) and executive bodies (Municipal Council) with administrative, financial and patrimonial autonomy

National ICT policy

The Mozambican ICT policy was approved in 2000. The policy sets out objectives in the priority fields of fighting poverty and illiteracy and developing human resources; providing access to information and knowledge; contributing to improve health, education and governance; promoting economic and business development. The ICT policy also sets out the following goals with respect to governance:

- to raise the efficacy and efficiency of public and private services
- to improve governance and public administration

. Later on 2001, the policy was made into an action plan and respective efforts turned to drafting an implementation strategy approved by the council of ministers in 2002

e-local governance strategy

The local governance development strategy lies in its premise to include people from all walks of life in community decision making. All sorts of constituencies, women, minorities, small business, subsistence farmers, rural and urban will then get equal participation in decision-making. That will give them representative status which is a key element in empowerment that can be a significant voice in public decisions and their future. Local policy decisions enforcing this empowerment will serve these newer constituencies, providing more appropriate infrastructures, better living conditions, and enhanced economic growth. These improvements will then reduce poverty and enhance equity among all groups.

e-readiness of local governments

The findings from the ICTs surveys and studies indicate that awareness and use of email, internet and computers is low compared to radio, TV, and telephones. This is due to high prices of telecommunications services and hardware/software (computers and associated technologies). The Capital city, Maputo has a higher awareness population than other provincial capitals. This is probably due to concentration of infrastructure including the technological, ICT skills and industry in the Capital.

Although very new, the technology of mobile phones compared to the others, has shown to be the most used and useful for the population. Despite the lack of electricity in some visited and very remote areas, it is a very important instrument for the local leaders and their population.

South Africa

National e-governance policy

Local governance system. The 1996 White Paper on Local Government initiated a period of restructuring where 843 local authorities were collapsed into 284 Local Councils, a number of District Councils and 6 Metropolitan Councils resulting in “wall-to-wall” local government. Local council areas are effectively regions incorporating urban, peri-urban and rural areas under Local Government’s jurisdiction, district councils are umbrella authorities that incorporate a

number of local municipalities and the 6 Metropolitan Councils representing the major cities and their surrounding urban and peri-urban areas. The majority of municipalities are peri-urban or rural municipalities and all are responsible for providing bulk infrastructure including water, sanitation, refuse collection, electricity reticulation and other basic services to households and communities.

Municipalities are managed by Municipal Managers that are accountable to the populace through a five-year performance-based contract (that run concurrently with the 5-year political election term). Political decision-making is the responsibility of elected Councils based on a ward representation system. Local Municipalities fall within District Council boundaries also, where District Councils are expected to play a supportive and coordination role (in their relationship to Local Councils) as well as manage district-level service delivery and development. Provincial Government departments play a mentoring and capacity-building role whilst also having their own specific competencies with regards to service delivery; each Province has a Local Government Department that oversees the implementation of IDPs for example. National Government's Department of Provincial and Local Government is responsible for the effective functioning of local government whilst also providing funding where required.

Governance policy. South Africa's Constitution provides for a system of co-operative governance, where National, Provincial and Local Government co-function distinctively, interdependently but are interrelated. More importantly, the Constitution establishes the principle of developmental local government where municipalities are mandated to foster and drive socio-economic development as well as perform their service delivery functions.

The Integrated Development Plan (IDP), defined by the national government's Department of Provincial and Local Government (DPLG), is a product of the integrated development planning process, the principal strategic planning instrument which guides and informs all planning, budgeting, management and decision-making in a municipality over a five year period. Included also are very definite guidelines on Community Participation that focus specifically on involving Civil Society in decision-making.

The local government restructuring process has made Integrated Development Planning a key requirement of Municipalities. IDPs reflect a preoccupation with strategic planning processes that respond to change more flexibly and provide the challenge for municipalities to move beyond planning into implementation.

There are two dimensions to local government services. The first is concerned with macro level functions such as planning and promotion of integrated development planning, land, economic and environmental development. The second dimension relates to the provision of specific services such as health housing and electricity.

National e-government strategy (Not indicated)

Legal framework

Three Acts determine parameters for the definition, functioning and demarcation of Municipalities: the Municipal Systems Act of 2000, the Municipal Structures Act of 1998 and

the Municipal Demarcation Act of 1998. The legislation is supported by an array of policy documentation related to local economic development, social development, public/private partnerships as well as community based public works. The Municipal Systems Act of 2000 formally introduced “integrated development plans” as frameworks for implementation to be adopted by all levels of local government.

National ICT policy(Not indicated)

e-local governance strategy : No local level e-governance strategy

While national government has acknowledged the importance of e-governance, there is presently no guiding framework for local e-governance, nor municipalities assessed against their e-governance capabilities in Gauteng.

No overarching policy or strategy on e-governance, at either a national or provincial level. Two exceptions to this are the Ekurhuleni Digital City Strategy (where the e-governance Strategy is embedded in the Digital City Strategy), and the Gauteng Broadband Strategy. The Ekurhuleni Digital City strategy contemplates providing broadband access to the home for all households.

e-readiness of local governments

Most municipalities focused on connectivity infrastructure development. Nearly half of the households in Gauteng (49%) have access to a cell-phone, only a few households have access to landlines (28.5%). All of the municipalities can be contacted via fixed line numbers but most people, and certainly marginalized citizens, rely on mobile technology for regular communication and interaction (through text messages). Regarding Internet, only about 4% have a working internet connection at home. This is attributed to the cost of PCs as well as the dial-up access charges and line rentals. The same would apply to the use of cellphone technology for accessing the Internet. Therefore in spite of the available infrastructure, the rate of Internet usage is seriously constrained by the lack of affordability.

Uganda

National e-governance policy: The report indicates that there is no specific policy on e-governance

Local governance system. The system of local government in Uganda, subject to Article 176 of the 1995 Constitution (as amended), is based on the district as a unit, under which there are lower local governments such as counties, sub-counties, parishes. The local governments (at the sub county and district level) are led by directly elected persons who form local government councils. The local councils (LCs) have both legislative and executive powers. The local governments also assist in the resolution of disputes, monitor the delivery of services and assist in the maintenance of law, order and security.

Under decentralization, districts (Higher Local Governments [HLG]) and sub-counties (lower local governments [LLG]) have been empowered by the Uganda Local Government Act (Cap 243) to be self-governing. This means that planning and implementing projects, identifying

revenue streams and managing revenue, identifying, developing, hiring and firing human resources, budgeting and budget control are done by the local governments and not the central government. In the local government structure, the district acts as a focal point for accounting of resources while lower councils act as centers for implementing district programs. The overall management of a local council now requires that the council makes considerable investment in human resources and infrastructure including ICT, to manage these increased responsibilities.

Decentralization policy. Decentralization in Uganda has been implemented since 1992, guided by the Constitution of the Republic of Uganda, 1995 (as amended) and the Local Governments Act, Cap 243. This was based on the convictions that decentralization comprehensively facilitates the realization of development and political objectives for Uganda through democratization, equitable distribution of resources among and within districts and improvements in the public sector performance. Democratic participation thus advocates for popular participation, empowerment of local residents and regular elections. The decentralization system applies to all levels of local governments and is intended to improve transparency and accountability in local governments, promote good governance and participatory democracy. Elected Local Government Councils which are accountable to the people are made up of persons directly elected to represent electoral areas, with special seats for persons with disabilities, the youth and women councilors.

Legal framework

The report indicates that, in absence of a harmonized legal and institutional framework, (since the Policy has never been passed) it becomes difficult to ensure compliance with IT systems that are designed to cut across sectors.

Under the Local Governments Act, (Cap 243) one-thirds of the Local Councils should be comprised of women representatives to the Councils and also provides for representatives of youth, the elderly and persons with disabilities. The Parliamentary Elections Act, 2005 provides for Women Representation (elected) to Parliament for all the Districts and National Female Youth Member of Parliament. The Women can still contest directly for the other seats in Parliament. Legal provision has also been made to cater for the Youth, Army, Workers and Persons with Disabilities' representation in Parliament.

National ICT policy

In October 2003, the Uganda government produced a draft National ICT Policy. This policy envisions Uganda as a country where national development, especially human development and good governance, are sustainably enhanced, promoted and accelerated by efficient application and use of ICT, including timely access to information. Despite these expressed good intentions, the government is yet to produce a final ICT Policy

National e-government strategy

The Draft E-Government Strategy Framework, 2006 is still under review by the ICT ministry (which was created after the Draft Policy) to bring it in conformity with the many ICT initiatives in the country. The policy has never been enacted by Parliament. The framework is a strategy under which ICT is acknowledged as a tool and enabler for reforming government service

delivery, achieving transparency, accountability and credibility, for providing effective access to information, efficient and cost-effective service delivery, broadening public participation, promoting democracy, facilitating research and development, and enhanced competitiveness in the global

e-local governance strategy: Not indicated

e-readiness of local governments

All departments at the district/higher local government (HLG) have computers, a very small number of LLGs have computers (only 2 LLG in Mbale and 2 in Kayunga). Even those with computers, some including some departments at the Sub County/ lower local government (HLG), their computers had no functioning CD ROM drive, floppy drive or USB ports. Some HLGs had no Local Area Network(LAN) and no link between the Ministry and the Local Governments. ICT funding is also inadequate.

Utilization of ICTs including in local governance in Uganda is increasingly undermined by challenges that are characteristic of rural areas; remoteness, poor or lack of proper communication infrastructure, electricity shortages or complete lack of it.

Ghana

National ICT policy

To govern the employment of ICTs for national development, Ghana created a policy document, Information Communication Technology for Accelerated Development (ICT4AD), 2003. The vision of the policy was to improve the quality of life, for the people of Ghana by enriching their social, economic, and cultural wellbeing, through the modernization of economy and society

Within this broad vision, the policy document itemized the 14 pillars for defining priority areas and focus that were seen as crucial for national development. Among these pillars is a section for Facilitating Government Administration and Service Delivery: Promoting Electronic Government and Governance.

e-readiness of local governments

In some areas information dissemination is mainly done through the radio. There is low level of literacy in computing in the two areas (Tolon and Tamale). In the rural district of Tolon-Kumbungu knowledge in computing is only available to a small core of workers in the District administration. In Tamale internet accessibility and usage is not as universal as radio or television.

The distribution of telephones and other data communication services in Ghana is still a concentrated case in the urban south. For instance, Accra alone accounts for 50% of all telephone lines and more than 85% of Internet Service Providers (ISPs) in the country. The second largest city, Kumasi also in the south, accounts for about 30% of all telephone lines (Ministry of Communication 2004). Rural fixed line telephone is almost non-existent in the northern sector. Somehow cellular telephony system has made significant inroads in opening up Northern Ghana.

B. Good Governance Outcomes

Good Governance Constructs	Working Good Governance Definitions	Expected Good Governance Outcomes		
		E-Administration	E-Services/E-Citizens	E-Society
Participation	<p>Stakeholders participate in local government decision-making processes</p> <p>Kenya: 'neighbourhood meetings' between council officers, councilors and the stakeholders within close proximity of the council</p>	<p>Uganda</p> <ul style="list-style-type: none"> ◆ Increased staff and political leaders participation in decision-making ◆ Horizontal e-interactions and access to information between and amongst LGs <p>Kenya</p> <ul style="list-style-type: none"> ◆ Electronic exchange of information among staff members ◆ Increased participation of staff in LA decision-making ◆ Increased participation of staff in programme implementation <p>Ethiopia</p> <ul style="list-style-type: none"> ◆ participation of residents in Kebele in administration and service delivery as well as in decision making structures. (Committees) <p>Morocco</p> <ul style="list-style-type: none"> ◆ Back-office automation should enable citizens to check the progress status of their service requests via the web, cell phone <p>Egypt</p> <ul style="list-style-type: none"> ◆ The process-oriented methodology allowed employees to be actively involved in the analysis. 	<p>Kenya</p> <ul style="list-style-type: none"> ◆ Increased involvement of service consumers, private sector and civil society in LG processes ◆ Increased gender participation in service access <p>Morocco</p> <ul style="list-style-type: none"> ◆ Automated service delivery should introduce "self-service-technology" (e.g. touch screen kiosks) that enable citizens to serve themselves without being dependent on employee-intermediaries and their "good will" to do their job 	<p>Kenya</p> <ul style="list-style-type: none"> ◆ Improved exchange of information and interactions with central government, businesses and citizens ◆ Effective e-interaction among citizens and with local governments ◆ Increased inclusiveness in society interactions/ consultations (with business, industry and citizens) <p>Mozambique</p> <ul style="list-style-type: none"> ◆ Improved involvement of people affected the decision made by the central government <p>Ghana</p> <ul style="list-style-type: none"> ◆ Interactive radio programs helped the local government officials to appreciate better the problems their constituents face and how to address them. ◆ Quick feedback arising from the bureaus set up at the district ◆ Interaction on the CITRED website has tremendously improved

				<p>communication among leaders and the citizens</p> <ul style="list-style-type: none"> ◆ The introduction of docu-dramas opened avenues of ‘illiterate folks’ to participate in national and the local governance discourse. ◆ women can now contribute to the decision making process. <p>Mauritius</p> <ul style="list-style-type: none"> ● Local authorities have the opportunity to get more views on how their Revenue Management System is contributing to Good Governance advancement.
Transparency	<p>The full disclosure of information by LG and free access to LG operations and information by stakeholders</p> <p>Information presented in an easy, accessible format and alignment between the method of communication and citizens ability to receive information</p>	<p>Kenya</p> <ul style="list-style-type: none"> ◆ Enhanced financial transparency ◆ Extent to which financial policies, processes and procedures are clear and open ◆ Policies, processes and procedures are clear and open to the public <p>South Africa</p> <ul style="list-style-type: none"> ◆ e-Gov strategy explicitly builds in requirement for public access to information on social development problems and local economic development priorities. ◆ e-Gov project design incorporates a structured content management systems ◆ e-Gov strategy provides for 	<p>Kenya</p> <ul style="list-style-type: none"> ◆ Improved access to information and public services ◆ The councils have become more transparent and accountable to residents ◆ All payments are accompanied by receipts ◆ Issuance of business permits is transparent, consistent and straight forward ◆ Each council to maintain an exact count of all its properties using properties’ unique identifier. ◆ Improved access to pertinent information and public services <p>South Africa</p> <ul style="list-style-type: none"> ◆ E-Gov strategy explicitly builds in requirement for public access to information on social development 	<p>Kenya</p> <ul style="list-style-type: none"> ◆ Reduction in number of corruption cases in procurement ◆ Extent of openness in tender processing ◆ Readily accessible financial details ◆ Improved level of feedback from residents <p>Mauritius</p> <ul style="list-style-type: none"> ◆ Increased public access to information on revenue collection procedures and revenue rates

		<p>connectivity and digital inclusion</p> <p>Morocco</p> <ul style="list-style-type: none"> ◆ Back-office computerization, routinization and automation should bring visibility and traceability to LG internal operations <p>Mauritius</p> <ul style="list-style-type: none"> ◆ Increased number of staff awareness of changes in rates, policies, and procedures ◆ Increased transparency in revenue collection 	<p>problems and local economic development priorities.</p> <ul style="list-style-type: none"> ◆ e-Gov project design incorporates a structured content management systems ◆ e-Gov strategy provides for connectivity and digital inclusion <p>Mauritius</p> <ul style="list-style-type: none"> ◆ More efficient and effective delivery of public services <p>Morocco</p> <ul style="list-style-type: none"> ◆ Citizens should have very easy access to procedures to follow in order to request and receive services; the procedures should be available online and conveyed in a language easy to read and understand by ordinary citizens ◆ Make it easy for citizens to post comments, questions, and complaints with regard to service delivery; citizens need to receive feedback addressing their concerns <p>Mauritius</p> <ul style="list-style-type: none"> ◆ Feature of Track and Trace for online applications status. This does not allow discrimination while application in pipeline for approval. 	
Responsiveness	<ul style="list-style-type: none"> ◆ Two-way communication between LG officials and stakeholders for requests and feedback (complaints or compliments) ◆ Alignment between channels of communications and 	<p>Kenya</p> <ul style="list-style-type: none"> ◆ Reduced complaints from staff ◆ Enhanced feedback from staff ◆ Faster response to feedback from staff ◆ Increased staff satisfaction with computerized service ◆ Social development needs of households as well as economic development needs of municipal area clearly 	<p>Kenya</p> <ul style="list-style-type: none"> ◆ Customer satisfaction due to improved quality of service delivery ◆ Timely payment of bills for services ◆ Reduced queues at council counters or less waiting time ◆ Improved access to financial information ◆ There is a marked increase in interest in the council's financial performance 	<p>Kenya</p> <ul style="list-style-type: none"> ◆ Community satisfaction index – council's responsiveness towards resolving problems and inquiries ◆ Reduced complaints ◆ Reduced queues at council counters or less waiting time <p>Mauritius</p>

	<p>citizens' access to these channels</p> <p>Mozambique</p> <ul style="list-style-type: none"> ◆ To be proactive to the citizens and other institutions problems ◆ Automation of internal organization processes <p>Mauritius</p> <ul style="list-style-type: none"> ◆ ways LA systems meet local citizen needs and solve queries 	<p>articulated</p> <ul style="list-style-type: none"> ◆ e-gov strategy and operations explicitly respond to these expressed needs <p>Mozambique</p> <ul style="list-style-type: none"> ◆ Reduced time response within institutions' transactions ◆ Reduced time response for processes and activities within the institution <p>Morocco</p> <ul style="list-style-type: none"> ◆ Back-office records are computerized and stored into a database; the latter retrieves and instantly displays needed information as queried by LG personnel (and according to access rights) in order to process gov internal requests or citizens' requests; therefore, Back-office automation should enable increased responsiveness via: LG processing requests electronically (not manually), services (i.e. certificates) delivered in a speedy manner with print-out quality, free of errors (usually introduced with manual copying). the increased responsiveness should lead to reduced processing time from LG side, improved quality of services delivered, and reduced waiting time imposed on the recipients (i.e. citizens) 	<ul style="list-style-type: none"> ◆ Reduced number of complaints on billing errors ◆ Reduced turn around in issuance of business permits ◆ Reduced defaulters in payment of rates ◆ Reducing unauthorized payments due to real time monitoring of expenses <p>Mauritius</p> <ul style="list-style-type: none"> ◆ improved prompt service (processing and Billing time) ◆ Better cash flow due to improved and timely revenue collection ◆ Enhanced feedback from customers, central government, private sector, public and civil society ◆ Faster and more effective resolution of complaints from external stakeholders ◆ Customer satisfaction with service provision ◆ Increased access to LG services and information ◆ social development needs of households as well as economic development needs of municipal area clearly articulated ◆ e-gov strategy and operations explicitly respond to these expressed needs <p>Mozambique</p> <ul style="list-style-type: none"> ◆ Fast response to the problems of the citizens ◆ Reduced time for searching specific data <p>Morocco</p> <ul style="list-style-type: none"> ◆ Succeeding back-office automation, 	<ul style="list-style-type: none"> ◆ Increase in Customer Satisfaction
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			an electronic front-office should be developed; meaning, creating new electronic channels from which service recipients (citizens) can request, check the progress status, and receive services. Such channels can include: employee counter equipped with the automated service delivery, web-based services delivered via internet, cell phone, and touch screen kiosks	
Equity	Services provision or access on equal basis irrespective of gender, disability, socio-economic status or other forms of possible discrimination	<ul style="list-style-type: none"> ◆ Equity in computerized service access by staff without discrimination such as level in the organization and knowledge ◆ creating a level playing field for the staff for improvement <p>Morocco</p> <ul style="list-style-type: none"> ◆ With back-office routinization and automation, violations of "equity" can be at least visible and traceable; then it is up to LG managers to act on this evidence 	<ul style="list-style-type: none"> ◆ Equity in service delivery irrespective gender and other forms of marginalization ◆ Creating a level playing field for all service providers and requesters <p>Morocco</p> <ul style="list-style-type: none"> ◆ Automated service delivery should introduce "self-service-technology" (e.g. touch screen kiosks) that enable citizens to serve themselves without being dependent on employee-intermediaries; "self-service-technology" does not know favoritism; rather, it is programmed to follow the principle of "first come first served" in serving all citizens the same professional way ◆ "self-service-technology" should not exclude disadvantaged social groups suffering from basic/ ICT illiteracy 	<p>Morocco</p> <ul style="list-style-type: none"> ◆ All citizens are served on a timely and similar manner (regardless of social class) ◆ ICT eliminated the need for citizens to tip, for those expecting favors like jumping the queue
Effectiveness & Efficiency	<p>Uganda</p> <ul style="list-style-type: none"> ◆ Optimal use of resources while meeting stakeholders' expectations <p>Mauritius</p>	<p>Kenya</p> <ul style="list-style-type: none"> ◆ Enhanced financial performance ◆ Improved budget performance ◆ Enhanced financial management ◆ More efficient and effective 	<p>Kenya</p> <ul style="list-style-type: none"> ◆ Reduced cost and time in accessing services ◆ Accuracy of payroll processing ◆ Accuracy and timeliness of payments ◆ More efficient and effective delivery 	<p>Kenya</p> <ul style="list-style-type: none"> ◆ Reduced unauthorized spending ◆ Increased ability to track financial transactions ◆ Increased ability to monitor revenue

	<ul style="list-style-type: none"> ◆ Optimal use of resources for achieving Local Authorities purpose and objectives (We need to integrate something about effectiveness in the definition) 	<p>delivery of public services</p> <ul style="list-style-type: none"> ◆ Increased productivity of finance staff ◆ Facilitates the production of standard financial reports ◆ Increased revenue collection ◆ increased outstanding debt collection <p>South Africa</p> <ul style="list-style-type: none"> ◆ Improved call response times ◆ Increased productivity of financial staff ◆ Increased efficiency and effectiveness of internal business processes ◆ Improved productivity of staff ◆ Enhanced institutional performance <p>Mozambique</p> <ul style="list-style-type: none"> ◆ Increased number of systems and/or processes integrated in one ◆ Better planning and decision making due to high quality national geo-referenced data and land information. <p>Morocco</p> <ul style="list-style-type: none"> ◆ LG internal business operations are accomplished electronically (not manually) with: reduced processing time, less needed effort (simply via querying), higher quality (eg: free of errors), reduced labor with improved productivity ◆ % reduction in effort needed by LG employees in 	<p>of public services</p> <ul style="list-style-type: none"> ◆ Improved efficiency in mobilization of resources ◆ Better planning, management, budgeting, and billing ◆ Reduced turnaround time from lodging payment request to payment ◆ Better quality of services and information (timely, clear, accurate, efficient) ◆ Increased customer satisfaction ◆ Increased access to public services and information <p>Morocco</p> <ul style="list-style-type: none"> ◆ Community (served by LG) requests and receives services with reduced waiting time (eg instantly), reduced effort (one physical trip only to LG counter; or no need for it at all thanks to web-Based services), and less money (travelling expenses due to multiple physical trips to LG counters, occasional need to bribe to be served) ◆ % improvement in the quality of services delivered. ◆ % reduction in errors introduced during request processing / service delivery <p>Mozambique</p> <ul style="list-style-type: none"> ◆ Improved data organization, searching and sharing, ◆ Faster response time to the client <p>Uganda</p> <ul style="list-style-type: none"> ◆ Improved allocation and use of available resources at LG <p>Egypt</p> <ul style="list-style-type: none"> ◆ Organizational processes are 	<p>collection in all income streams</p> <ul style="list-style-type: none"> ◆ Tighter financial controls (payroll, procurement, etc.) ◆ More efficient information exchange with central government, businesses and citizens <p>Morocco</p> <ul style="list-style-type: none"> • % reduction in citizens' waiting time for the delivery of their services • % reduction in citizen's effort to request & receive their needed services (eg: time of queuing) • Reduced physical trips to LG counter to request & receive their needed services • % reduction in money required to request & receive their needed services (travelling expenses due to multiple physical trips to LG counters, occasional need to bribe to be served)
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		<p>accomplishing internal business processes.</p> <ul style="list-style-type: none"> ◆ % reduction in LG labor. <p>Uganda</p> <ul style="list-style-type: none"> ◆ Higher success rates and achievements and improved quality o LG development plans <p>Mauritius</p> <ul style="list-style-type: none"> ◆ Reduction in administrative costs, downsizing staff, ROI ◆ Increase in staff productivity ◆ More standardized procedures in performing transactions 	<p>articulated in a rigorous, precise, complete, and clear manner.</p> <ul style="list-style-type: none"> ◆ standardization of processes that were intended to be identical in different municipalities <p>Mauritius</p> <ul style="list-style-type: none"> ◆ Improved cash inflow for local authority Due to efficient revenue collection ◆ More people using the computerized revenue system on their day-to-day activities. 	
Accountability	LG managers and employees are accountable to citizens and other key stakeholders	<p>Kenya</p> <ul style="list-style-type: none"> ◆ Evidence of follow up on audit recommendations ◆ Enhanced financial accountability ◆ Regular and adequate feedback to management on performance of internal control systems ◆ LG managers and employees are accountable for their actions <p>Morocco</p> <ul style="list-style-type: none"> ◆ Back-office automation means that LG internal operations are being automated and routinized; it should be possible to monitor and trace LG personnel activities: know who does what and when; this should be useful to monitor corrupted/ immoral personnel 	<p>Kenya</p> <ul style="list-style-type: none"> ◆ All licenses can easily be tracked ◆ The exact count of all properties under its jurisdiction is maintained since each property has a unique identity. ◆ Revenue collected is monitored as per revenue collector and all staff in the council can be easily tracked through the payroll ◆ expenditure is tracked by the council from authorizing persons to the receipts ◆ LG staff can be identified with their actions in service delivery and be held responsible for them <p>Morocco</p> <ul style="list-style-type: none"> ◆ Electronically enabling LG Back-office & front-office means the LG service delivery is being routinized and automated; it should be possible to monitor and trace when citizens' 	

		practices (such as delaying request processing)Morocco)	requests were received, processed, and delivered; such routinization makes it possible to have criteria and standards (eg accepted processing time, etc) against which LG personnel accountability can be monitored	
Rule of Law	Laws and administrative procedures are applied fairly and objectively	<p>Which country? From 'E-governance evaluation; Towards an Integrated Outcome Evaluation Research Framework' (Waema)</p> <ul style="list-style-type: none"> ◆ Increased objectivity in applying legal instruments, policies and administrative procedures <p>Morocco</p> <ul style="list-style-type: none"> ◆ With back-office routinization and automation, violations of "rule of law" can be at least visible and traceable; then it is up to LG managers to act on this evidence and punish/correct the immoral practice 	<p>Which country? From 'E-governance evaluation; Towards an Integrated Outcome Evaluation Research Framework.' (Waema)</p> <ul style="list-style-type: none"> ◆ Increased objectivity in applying legal instruments, policies and administrative procedures <p>Morocco</p> <ul style="list-style-type: none"> ◆ Automated service delivery should introduce "self-service-technology" (e.g. touch screen kiosks) that enable citizens to serve themselves without being dependent on employee-intermediaries; "self-service-technology" does not know favoritism; rather, it is programmed to follow the principle of "first come first served" in serving all citizens the same way 	<p>Morocco</p> <ul style="list-style-type: none"> ◆ Unnecessary need to tip reinforces the law of equity: ◆ Elimination of the need for violations of the law through tipping
Consensus Orientation	Conflicts of interest of the various stakeholders are resolved	<p>Which country?: From E-governance evaluation; Towards an Integrated Outcome Evaluation Research Framework (Waema)</p> <ul style="list-style-type: none"> ◆ Reduced internal conflicts of interest ◆ Reduced the possibility of alienation of staff that could be caused by minority versus majority of votes 	<p>Which country?: E-governance evaluation; Towards an Integrated Outcome Evaluation Research Framework (Waema)</p> <ul style="list-style-type: none"> ◆ Reduced conflicts of interest in service delivery 	
Strategic Vision	Mauritius ◆ Managers and the	Which country? : From E-governance evaluation; Towards an	Which country?: E-governance evaluation; Towards an Integrated	

	<p>public have a long-term view of better governance but are aware of contextual obstacles and their solutions</p>	<p>Integrated Outcome Evaluation Research Framework (Waema)</p> <ul style="list-style-type: none"> ◆ Enhanced long-term view of governance <p>South Africa</p> <ul style="list-style-type: none"> ◆ e-Gov strategy exists ◆ Social and development priorities are clearly articulated ◆ e-Gov strategy is explicitly aligned to these development priorities 	<p>Outcome Evaluation Research Framework (Waema)</p> <ul style="list-style-type: none"> ◆ Enhanced long-term view of governance <p>South Africa</p> <ul style="list-style-type: none"> ◆ e-Gov strategy exists ◆ Social and development priorities are clearly articulated ◆ e-Gov strategy is explicitly aligned to these development priorities <p>Morocco</p> <ul style="list-style-type: none"> ◆ improved policy/strategies for ICTs in LGs in national e-govt policy/strategies: 	
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Annex 6: Project Schedule

Activity	2006												2007												2008					
	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6		
1. “Kick off” of LOG-IN Africa Research Network and establishment of a website to manage & coordinate the Network	■																													
2. Start up of National Research Projects	■																													
3. Deeper analysis of the state of ICTs and Local Governance in the selected countries		■																												
4. Preparation of draft Assessment Methodology, including a set of indicators for discussion		■																												
5. First e-discussion on Assessment Methodology			■																											
6. LOG-IN Africa methodology workshop in Tangier, Morocco, to discuss the Assessment Methodology				■																										
7. Delays due to changes in project management					■	■	■																							
8. Refinement of the Assessment Methodology and Set of Indicators								■	■	■																				
9. First technical and financial progress report											■																			
10. Implementation of National Research Activities, including the application of the Assessment Methodology											■	■	■	■	■															

Activity	2006												2007												2008					
	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6		
to Research Activities and training of researchers for data collection																														
11. Reporting of results of National Research Project implementation and integration of results at network level														■	■															
12. Mid-term evaluation of the Network															■															
13. Mid-term workshop in Mauritius																■														
14. Second technical and financial progress report																	■													
15. Implementation of National Research Activities																	■	■	■	■	■	■	■	■	■	■	■	■		
16. Preparation of draft LOG-IN Africa Road Map																		■	■											
17. 2 nd e-discussion on draft LOG-IN Africa Road Map																			■	■	■	■	■							
18. Third technical and financial progress report																							■							
19. Final definition of the draft LOG-IN Africa Road Map																								■						
20. Revision and validation of LOG-IN Africa Road Map																									■					
21. National workshops to report findings and results of National Research implementation and integration																									■					
22. Integration of national findings and results into a common framework																										■				

Activity	2006											2007												2008					
	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	
23. Final and international dissemination workshop in Cairo (Egypt) to present the findings and results of the Research Network Activities and LOG-IN Africa Road Map																													
24. Research Network Evaluation and publication of the Research Network results																										■	■	■	
25. Final technical and financial progress report																												■	