**Information and Communication Technology (ICT)**

Selected Projects

Zambia. *Zambian Electronic Perinatal Record System (ZEPRS),* Bill and Melinda Gates Foundation, 2002-2006. Under a subcontract to the University of Alabama at Birmingham, RTI is using open-source software to build a patient records system for obstetric clinics in the Zambian capital. This system will operate over a high-speed wireless data network connecting 24 clinics in Lusaka. South African experts are working closely with RTI on network and software design and development. The resulting system will replace an existing manual system, providing quick, secure access to patient records, instant information on patient referrals, better patient follow-up, up-to-date performance indicators, and longitudinal data for intervention assessment.
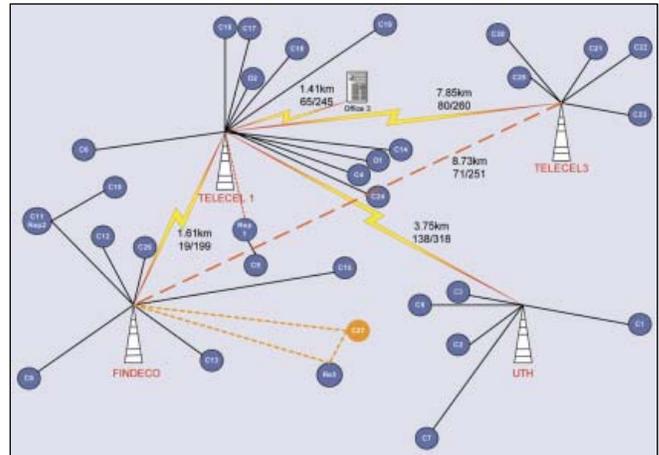
Through ZEPRS obstetric clinics in Lusaka will have quick access to patient records via a wireless network.

Worldwide. *DOT-COM/dot-ORG*, USAID, 2001-2006. RTI is a core partner under this program designed for extending ICT access to the underserved, with a special focus on gender issues. Examples of activities under this program include assessments and pilot activities for Missions on how to incorporate ICT in their programs in education, democracy and governance, environment, health, and economic growth; systems for community ICT access; assistance in using ICT for crisis prevention, distance training, environmental surveillance, and telemedicine; and solutions for off-grid and wireless access. Under dot-ORG RTI conducted groundbreaking training programs for women political candidates in Morocco in using the Internet for advocacy. See the DOT-COM Web site (www.dot-com-alliance.org) for more information.

Worldwide. *Global Network for Women's and Children's Health Research*, NICHD, 2000-2005. The U.S. National Institutes of Health and the Bill and Melinda Gates Foundation formed the Global Network for Women's and Children's Health Research to improve women and children's access to prenatal and neonatal care. The Global Network currently supports research on women's reproductive and children's health in South Asia and in Central and South America and plans future studies in Africa and Eastern Europe. RTI serves as the Data Collection Center for this pioneering 5-year effort, selecting and installing computer equipment, designing data systems, and providing logistical support to researchers in the field. RTI also ensures data standardization and quality and supplies the information technology infrastructure for safe data storage and analysis. A crucial link in the Global Network, RTI allows researchers around the world to share experiences and findings through a Web site (gn.rti.org), thus enabling them to identify emerging

The Global Network Web site helps researchers share information and inform the public.

risks to women and children's health and to improve intervention programs.

Guinea. *Community Support and Equity in Guinean Primary Education Program*, USAID, 1997-2006. This project assists Guinea to improve access to and quality of primary schooling, emphasizing girls' participation and education in rural areas. RTI assisted the Ministry of Pre-University Education in two areas: (1) strengthening strategic planning and decision-making processes; and (2) supporting greater classroom learning, through improved teaching and learning methods and materials. RTI's resident and short-term planning and information advisors proposed a system of traceable indicators of fundamental quality and equity, as well as supporting the development and evaluation of a local and national dialogue process to review and finalize the indicators; and provided technical support and training to the Education Planning and Research unit for survey research analysis, information management systems, database development, and finance and budgeting.

Worldwide. *NIMH Cooperative HIV/STD Prevention Trial*, U.S. National Institute of Mental Health, 1999-2005. This two-arm randomized, community-level trial is being conducted in five countries: China, India, Peru, Russia, and Zimbabwe. This is the first international test of a community-level prevention program—Popular Opinion Leader—based on the theory of diffusing innovations using Community Popular Opinion Leaders (C-POLs). The NIMH Cooperative HIV/STD Prevention Trial is an opportunity to adapt this sophisticated intervention model in international sites using both behavioral and biological outcomes. RTI is the Data Coordinating Center for this effort, providing extensive assistance in data collection, management, transmission, and analysis. RTI-provided information technology has been used for audio computer assisted self-interviewing (ACASI), computer-assisted personal interviewing (CAPI), data management systems (DMS), laboratory management systems (LMS), and secure automated data transmission from

Managing HIV/STD prevention trial data, Chinese Academy of Medicine, Beijing, China.

remote sites to a central data center for monitoring and analysis. An RTI-developed Web site (www.rti.org/u10) is being used to share information among research team members and to provide information to the public.

Mali. *Support to the Association of Municipalities of Mali (AMM),* USAID, 2001-2003. This project seeks to strengthen the capacity of the Association of Municipalities in Mali (AMM) through technical assistance, training, and an exchange program. The program will enhance AMM leadership, as well as institutional, management, and advocacy skills. It will also strengthen the ability of the AMM to serve its members by defending their interests and making demands on the central state authorities on behalf of members. The project will provide Internet connections and computer equipment to each of the AMM's regional offices to foster communications between members and with collaborators outside Mali. The project will also train AMM members in the effective use and maintenance of their computers and Internet access.


AMM members learn how to make effective use of computers and the Internet to build the capacity of their organization.

Ukraine. *Regional Offices for the Association of Ukrainian Cities (AUC),* USAID, 2000-2003. RTI has worked with the AUC to improve professional municipal management through training and to produce—and air on national television—a series of ten films to educate the public in the role of local government in the new Ukraine. RTI is helping the AUC establish a system of regional offices by equipping and training AUC staff in regional offices and in the central AUC office in Kyiv. In June 2002 RTI helped the AUC design and produce the AUC Web site: *AUC Dialog: The Voice and Experience of Ukrainian Cities* (www.auc.org.ua). This Web site has proven to be a powerful tool in improving communication among the nearly 400 AUC member cities and towns.

The AUC Web site helps Ukrainian cities share experiences and best practices.

Egypt. *Decision Support Services Project (DSSP)*, USAID, 1995-2002. DSSP was designed to increase the capacity for public policy analysis and dialogue regarding economic reforms under way in Egypt, and to support trends in political and economic liberalization. DSSP worked to improve the Egyptian Parliament's capabilities to use information technology to inform parliamentary debate. RTI technical specialists worked closely with Parliament information centers to engage them in strategic information technology planning. DSSP trained hundreds of Egyptian parliamentary staff and provided significant upgrades to Parliament information systems. The resulting information system is more decentralized and more accessible to staff and members. Parliament monitoring and evaluation data show a significant increase in use by members of institutional information sources and "hard" data in parliamentary debate over the life of DSSP.
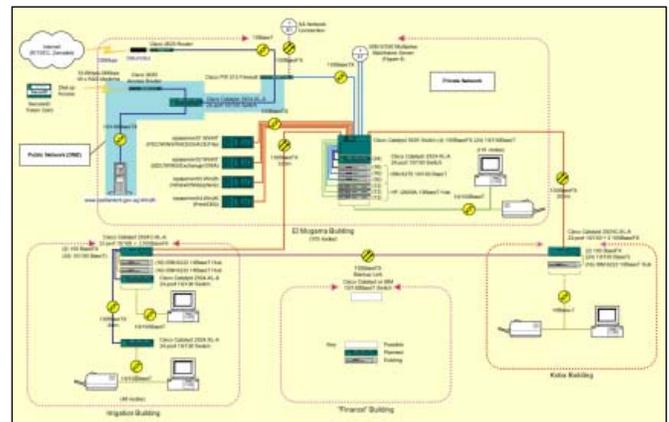
Significant improvements in information systems help inform debate in the Egyptian Parliament.

Ethiopia. *Basic Education System Overhaul (BESO),* USAID, 1995-2002. RTI's fields of concentration within BESO were policy analysis and education financing and planning in an effort to help strengthen management and administrative capacity in the central Ministry of Education.

and in the regions. RTI's efforts focused on planning, the use of management information systems (MIS), school mapping, budgeting, and financial management within a decentralized education system

Africa. *Education for Democracy and Development Initiative (EDDI),* "Strengthening Democratic Networks in Decentralization and Local Governance Project," USAID, 1999-2003. This project continues work initiated by USAID's Leland Initiative (1997-1999) to expand Internet access in Africa and help Africans use the Internet and other global information technologies to achieve sustainable development. RTI helped establish the African Regional Dialogue on Decentralization (www.ddialogue.org) to support democratic decentralization. DDialogue is active in Côte d'Ivoire, Mali, Benin, Burkina Faso, Guinea, Senegal, and Ghana.

RTI also helped establish the EDDI-funded African Executive Office Network (ExecNet). ExecNet creates opportunities for African multisectoral dialogue and exchange for more effective public policy formulation, implementation, and management. The ExecNet Web site (execnet.rti.org) supports a community of African professionals working in the office of the president or other chief executive to improve governance.

Also under EDDI, RTI helped establish the African Judicial Network (AJN). AJN is an international partnership to foster efficient and effective judicial systems in members' respective countries and to promote beneficial relationships among members. The AJN Web site (ajn.rti.org) encourages information sharing among AJN members, making information more accessible while making it easy for members to

DDialogue helps Africans share experiences and best practices in local government decentralization.

contribute content and participate in online or e-mail discussions.

Also under EDDI, RTI developed a proof-of-concept Web site for in-service training of local government officials to support democratic decentralization efforts in Africa. The Local Governance University (www.rtilgu.org) uses the Web to connect people, experience, and tools for effective local governance. Through LGU, RTI successfully completed local government finance and citizen participation pilot training courses in Ghana. RTI hopes to extend the LGU course catalog for local governments in other countries and other regions of the world through partnerships with other organizations, and is currently seeking technology and content partners for this effort.

Bulgaria. *Local Government Initiative***,** USAID, 1998-2001. RTI, in partnership with the Foundation for Local Government Reform (FLGR), designed the *Innovative Practices in Bulgaria* Web site (www.flgr.bg/innovations). FLGR and RTI built this site in response to people in local governments across Bulgaria who need to share their programs and ideas with each other. The *Innovative Practices* site allows users to create and manage site content. Local government officials can easily add their own innovative practices and upload them directly to the Web site. The site also allows users to attach illustrations, files of additional information, and a photograph of themselves. Users are invited to nominate the Innovation of the Week, which is displayed on the home page to recognize innovators and their organizations and to encourage other innovators to share their programs. In addition to building the Foundation's storehouse of innovations for online and print sharing, this arrangement reduces the cost of systems support and maintenance.

Local governments across Bulgaria share innovations and best practices through the Innovative Practices Web site.

Greater Mekong Subregion. *A Study of the Health and Education Needs of Ethnic Minorities in the GMS*, Asian Development Bank, 1999-2001. This effort was designed to improve living conditions of ethnic minorities living in the mountainous and border areas of the Greater Mekong Subregion (GMS), by helping to strengthen the capacity of service providers to address the health and education needs of these minority groups. To achieve this goal, RTI applied an approach to research and dissemination activities that were integrated, regional, participatory, multi-method, and grounded in a set of guiding principles. This approach ensured that analyses, examples, and recommendations were sound and useful for developing effective and sustainable programs. Guiding principles considered issues of ethnic identity and its preservation, national sovereignty, the delicate topic of cross-border relations, methodological comparability, and program sustainability. Throughout the this effort, RTI used Web technology (www.rti.org/mekong) to enable research team members to coordinate efforts and share information across regional and national boundaries, and to provide convenient public access to project status and results.
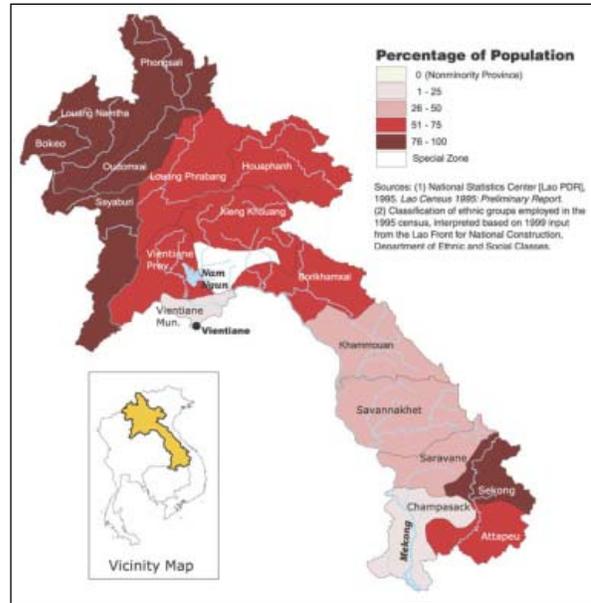
Mekong project research teams share and publish results through the Mekong Web site.

Russia. *Regional Public Finance and Investment Partnership,* USAID, 1999-2001. This project used the Web to support open, transparent interaction with citizens, including sharing of government service, finance, budget, and purchasing information. The Association of Siberian and Far Eastern Cities (ASFEC – www.asdg.ru) and Tomsk Municipality applied a market-driven approach to build a model municipal Web site focused on using the Web to deliver useful content and services to citizens, businesses and potential investors, NGOs, government policymakers and employees, and the news media.

Ghana. *Information Systems Assessment of the Ghana National Electoral Commission*, USAID, April 2000. RTI conducted a detailed and comprehensive assessment to determine the feasibility of an Intranet connecting regional and district elections offices, and the resources required to build it. The assessment outlined a phased approach to automating voter registration and voting at regional and district levels. This assessment helped USAID to more effectively target its program funds to strengthen the Electoral Commission's capacity to handle the data for the December 2000 general elections in Ghana.
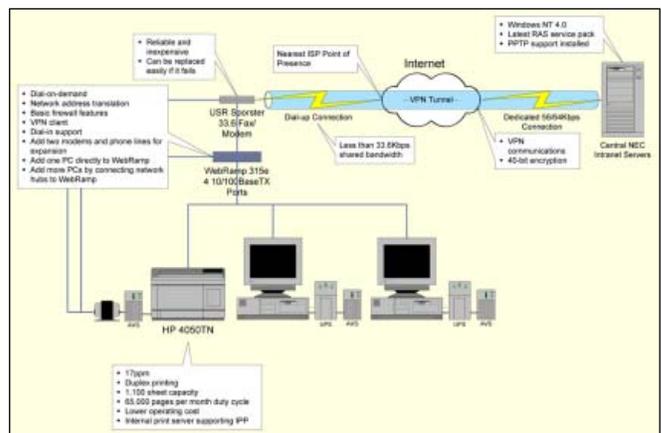
A network diagram showing the NEC Phase I regional and district elections offices intranet connections.

Egypt. *Partnerships in Health Reform (PHR),* USAID, 1998-2000. Under an agreement with Abt Associates, RTI provided technical assistance in health management information system development for the Egyptian Ministry of Health and Population (MOHP). RTI provided technical assistance in sustainable ICT transfer, ICT organizational development, decision support systems, database design, and development of a health budget tracking system in the context of overall strategic planning for health information systems. RTI's role was established through a previous task order under which RTI completed a comprehensive assessment of USAID-funded health information systems assistance in Egypt.

RTI ICT technical specialists helped develop the new National Information Center for Health and Population (NICHP) in the Ministry of Population, assessed existing health information systems (HIS), trained and mentored NICHP staff in developing an executive information system (EIS) to identify limitations in the HIS and engage decision makers in developing a better system. RTI led training in relational database design in the context of designing a new HIS to support health sector reform efforts and the changing role of the MOHP. RTI also developed a successful strategy and work plan for transferring the health budget tracking system to all 27 Egyptian governorates.

Ghana. *Urban Internet Applications for Africa, Improving Local Governance, Central Region Network (CRnet),* USAID, 1996-1999. RTI worked with the government of Ghana to build CRnet (the Central Region Network), an innovative Intranet application in Africa. CRnet is designed to improve communication, accountability, and efficiency among regional and district-level local governments in Ghana's Central Region. CRnet links 12 districts and the central regional administrative team. Operated by the Central

Region Coordinating Council, CRnet allows districts to share information, perform routine administrative tasks over the network, and access the resources of the World Wide Web. Working with Ghanaian ICT professionals, RTI provided technical assistance in network and Intranet development and in training district planning, budget, and executive personnel to use computers; standard office applications, such as word processing and spreadsheets; e-mail; and the Web.

El Salvador. *Municipal Development and Citizen Participation Project*, USAID, December 1996. RTI created a Web site for COMURES, El Salvador's national municipal association (www.comures.org.sv/comures) under this project. Local RTI staff in El Salvador created the site to serve as a source of information to municipal governments and to promote information sharing. The site features innovative case studies from different cities addressing common problems, such as solid waste disposal. The site also features a clickable map of El Salvador with the names of members in each district. One can also find news from different municipalities in El Salvador and summaries describing municipal projects. Users can also subscribe to COMURES publications on the site.

Municipal governments in El Salvador share case studies through the COMURES Web site.