



CALL FOR PROPOSALS

AFRICAN ECONOMIC RESEARCH CONSORTIUM

Special Research Project on

ICT and Economic Development in Africa

1. Background

Technological innovation in the late 20th century has led to significant developments in new technologies such as biotechnology, new materials and microelectronics together with innovations in software development. The combination of advanced microelectronics and innovations in software development has led to systemic technologies which have come to form a pervasive cluster of information and communication technologies (Mansell, 1994)¹. The diffusion of information and communication technologies (ICTs) into all sectors of the economy has impacted on virtually all aspects of productive activities given that the adoption of ICT has been most persistent in the last 2-3 decades.

Diffusion and adoption of ICT in manufacturing and services sectors has been particularly rapid. The nature and extent of ICT adoption has been explored quite extensively in recent research as evident in the literature. In the case of Africa the nature and extent of adoption has been addressed in various research programmes (e.g Research ICT Africa, supported by IDRC). This information is useful in understanding the pervasiveness of ICTs and the extent and patterns of access. *What has not been explored adequately is the impact of ICTs on economic growth and structural transformation, at least in Africa.*

This special project is therefore designed to contribute to filling this gap. AERC has so far commissioned nine framework papers that define the scope of this study. The next step is to move to the second stage of implementation of the project, which is the commissioning of country case studies to investigate the impact and implications of ICTs on economic growth and structural transformation in Africa.

2. Terms of Reference for the country case studies

The objective of this study is to investigate the impact and implications of ICTs on economic development and transformation in Africa. More specifically this study will address two main questions:

- (i) What is the status of ICT adoption and penetration in production and employment generating activities that could lead to economic growth and structural transformation in Africa?
- (ii) What are the policy options for enhancing the contributions of ICT to enhancing economic growth and structural transformation in Africa?

¹ Mansell, R. (Ed.). The Management of Information and Communication Technologies: Emerging Patterns of Control. Science Policy Research Unit. Published by The Association for Information Management, London, 1994.

Scope of work

The role of ICT in economic growth and structural transformation is expected to be manifested in **productivity increase, enhancing efficiency, reducing production cost, creating new economic activities and new employment opportunities as well as generating wealth.** Proposals for a country case study may be prepared in each of the clusters identified below to permit the in depth analysis of the impact of ICT on economic growth and structural transformation at the sectoral and macro levels.

A. Production of ICT Hardware and Software - Supply Side Issues

- Analysis of national ICT hardware and software production and development policy and Strategies
- Status of supportive ICT production infrastructure and human resources development
- The manufacture and assembly of computers (branded or unbranded/clones) and include clusters that are emerging in activities associated with repair/maintenance of computers.
- The development of computer software industry including support/maintenance services
- The status and development of cellular phone industry – hardware and software
- Factors driving investments in ICT hardware and software production activities e.g. market size (national and/or regional), infrastructure base, human resource endowment, wage rates and prices.

B. Demand for and use of ICT products and services

- Analysis of national ICT hardware and software utilization policy and Strategies
- Status of supportive ICT utilization infrastructure including human resources development
- The penetration of computer hardware and software services (branded or unbranded/clones) in industry and their impact of productivity, efficiency and cost effectiveness
- The penetration of cellular phone services in industry and their impact on productivity, efficiency and cost effectiveness
- The penetration of the telecommunications services– Voice Over Internet Protocol (VOIP) in industry and their impact on productivity, efficiency and cost effectiveness
- The role of e-commerce, enterprise management and e-services in agriculture and manufacturing value chains
- The use of ICT in enterprise management and in production systems in the form of automation.
- Factors driving investments in ICT service utilization e.g. market size (national and/or regional), infrastructure base, human resource base, wage rates and prices.

Country coverage

To ensure broad optimal coverage of SSA's regions, the following 12 countries have been identified for study:

Region	Countries
Anglophone West Africa	Nigeria, Ghana.
Francophone Africa	Cameroon, Senegal,
East Africa	Kenya, Uganda, Tanzania, Rwanda
Central Africa	Republic of Congo
Southern Africa	Botswana, Mozambique, South Africa.

3. Call for Proposals

AERC is inviting proposals that will identify the research problem, briefly review related literature, highlight the innovations of the proposed investigation, summarize its methodology, and indicate the availability and the types of data to be used.

Interested AERC network members based in the countries listed above are hereby requested to submit a proposal to conduct the country case studies, and encouraged to form teams of at most three researchers with one identified team leader. Research teams are encouraged to include a female and a member of staff suitable for ICT development policy organization.

Each country case study team is also encouraged to set up a National Guidance Committee composed of policy makers and researchers. Researchers are encouraged to refer to the project framework papers that are available on the AERC website, www.aercafrica.org as they prepare their proposal. Proposals designed along the guidelines specified below should be submitted to the attention of the Director of Research, AERC, at the following email address: cresearch@ercafrica.org. The deadline for submitting proposals is **March 31, 2008**.

Proposal requirements

Each proposal should include the following:

Background. The policy context of the proposed research

Objective(s). A brief statement of the specific objectives of the research derivable from the coverage of the scoping studies mentioned above

Methodology. A statement detailing how the research objectives are to be achieved, i.e., hypotheses, methods, data collection, data analysis, etc

Results. Anticipated results and how they might contribute to knowledge, future research and especially public policy

Statement of qualification and current CVs

Work Programme and Timeline: A brief description of activities and timeline needed for each activity. Total duration of this study is 9 months

Budget. Estimated expenditure by major line item, e.g., research assistants, travel, computer time, etc. Total budget should not exceed US\$12,000

Researchers based in the case study countries with all or some of the following profiles are encouraged to submit a proposal. At least one team member must have either:

- a. completed at least one AERC thematic research project; and/or
- b. completed at least one AERC Collaborative Research Project; and/or
- c. participated in workshops organized so far to review the draft and revised framework papers for the AERC project on *ICT and Economic Development in Africa*.
- d. an ongoing or completed research project on similar topics not necessarily funded by AERC
- e. participated in a relevant component of AERC Training Programme