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# **OECD Global Forum on Knowledge Economy**

Information and Communication Technology (ICT) in Poverty Reduction Strategy Papers (PRSPs) as of August 2003.

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Contact Person: Mr. Ichiro Tambo; Tel: (33-1) 45 24 14 25, Email: ichiro.tambo@oecd.org

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# INFORMATION AND COMMUNICATION TECHNOLOGY (ICT) IN POVERTY REDUCTION STRATEGY PAPERS (PRSPs) AS OF AUGUST 2003<sup>1</sup>

Information and Communication Technology (ICT) should be seen as a means to help meet existing development objectives, in particular the Millennium Development Goals for poverty reduction, education, health and the environment, not as a separate sector or end in itself.

This research was conducted to analyse how ICT is treated in PRSP.

### **PRSPs**

At the Annual Meetings of the World Bank Group and the IMF in September 1999, it was agreed that nationally-owned participatory poverty reduction strategies should provide the basis of all World Bank and IMF concessional lending and for debt relief under the enhanced Heavily Indebted Poor Countries (HIPC) Initiative. This approach is being reflected in the development of Poverty Reduction Strategy Papers (PRSPs) by country authorities, building on the principles of the Comprehensive Development Framework.

PRSPs provide the basis for assistance from the World Bank and the IMF as well as debt relief under HIPC initiative. PRSPs should be country-driven, comprehensive in scope, partnership-oriented, and participatory. As of August 2003, 29 PRSPs have been developed.

See www.worldbank.org/poverty/strategies/

## **Research Findings**

The research scanned national priorities for poverty reduction and sector priorities in all 29 PRSPs to analyse how ICT is discussed. The summary of the review can be found in Annex 1. Key findings are as follows:

- In the 29 analysed PRSPs, 12 countries (Albania, Azerbaijan, Cambodia, Cameroon, Chad, Gambia, Ghana, Mali, Mozambique, Niger<sup>2</sup>, Rwanda and Sri Lanka) define or position ICT as a strategic component for poverty reduction and discuss it as an independent item in their PRSPs (see Annex 2).
- The rest of the countries have not included ICT as an independent strategic component. They mention telecommunications sector development as an "important factor for rural/agricultural development" or as "one of the components of the infrastructure for economic growth" (see Annex 3).
- The term "telecommunications" is used in most cases and the terms "ICT" and/or "Information Technology" are rarely used. However, those terms are more frequently used in recently developed PRSPs.
- Three countries (Tanzania, Uganda and Yemen) do not mention ICT in their PRSPs.

1. This study is a contribution from Japan International Cooperation Agency (JICA). The base-line research was conducted by Mr. Keiichi YONEZAWA, Senior Research Analyst, Social Development Studies Division, NLI Research Institute and JICA's in-house consultant on PRSP, in collaboration with OECD/DAC Secretariat. The initial study was done as of January 2003 and released on 25 February 2003. The current document is the updated and revised version of the original publication.

2. We would like to apologise for the fact that due to technical reasons, Niger was categorised as a county which does not mention ICT in its PRSP in the previous version of this paper. This has now been corrected.

# ANNEX 1

# $\label{lem:communication} \textbf{Information and Communication Technology (ICT) in Poverty Reduction Strategy Papers \\ (PRSPs)$

No.	Country	ICT component/s (Y/N)	How is ICT referred in PRSP
1	Albania	Yes	"Modernization of Information Technology" is listed as one of the most critical 7 <u>long-term</u> development goals for a transitional period towards market economy in Albania.
2	Azerbaijan	Yes	Specific chapter independently appropriated for ICT issues is not found. However, importance of IT is repeatedly stressed especially in chapters and columns discussing human resource development (social security, education, tourism) and infrastructure arrangements (agriculture, etc.).
3	Bolivia	No	"Rural telecommunications development" is simply mentioned as a means of poverty reduction in the poorest areas, but not as a priority goal or a strategic component of PRS/national development plan.
4	Burkina Faso	No	Not covered. Just the necessity of retrenching state monopoly in the telecommunications sector was indicated in the section on industrial development.
5	Cambodia	Yes	Specific chapter independently appropriated for ICT issues is not found. However, ICT application is fairly considered as one of the most important strategic factors, if efficiently operated at the adequately low-level cost, that brings about a push for economic growth, development of human resource and transparency of public affairs
6	Cameroon	Yes	ICT is supposed to be one of the most strategic development tools that liberates people from isolation and poverty, by increasing opportunities of access to ICT tools for the population with tax privilege, in the fields of health, education, agriculture, livestock, the environment, governmental transparency, PRSP monitoring, etc. The government also prospects the ICT sector will be one of centers of economic growth in the medium term.

No.	Country	ICT component/s (Y/N)	How is ICT referred in PRSP
8	Chad	Yes	The Government of Chad fully understands the value and utility of ICT increasing in the current context of globalization. Also they critically understand that any development by sector/by issue cannot be achieved or sustained without reliable information access.
9	Ethiopia	No	(1) "Importance of telecommunications for rural development" was indicated. (2) In one of the action programmes ("Justice System Reform Program") in the appendix, "upgrading IT skills of people working for the Parliament and Judiciary" was set as a target.
10	Gambia	Yes	ICT is not the first priority, but one of main components of infrastructure setup and capacity building; both are indispensable for PRS.
11	Ghana	Yes	"6.1.11 Information and Communication Technology (ICT)" is specifically appropriated for ICT application strategy concerning poverty reduction and national development as a whole. In this chapter, not only strategic goals but also a rough timetable of institutional establishment and concrete examples of ICT application (e.g. ecommerce, human resources development, etc.) are explained.
12	Guinea	No	Just a general thought on how to cope with an international trend of IT development is mentioned under "Communications and Culture Strategy in the Poverty Reduction Context" in the appendix.
13	Guyana	No	Only (1) the fact that lack of scientific and IT-related laboratories seriously contributed to the low performance of students in the educational sector; and (2) the need of promotion of IT-related exports were introduced.

No.	Country	ICT component/s (Y/N)	How is ICT referred in PRSP
14	Honduras	No	Almost no mention. Just the necessity of (1) rural telecommunications development, and (2) privatisation of public utilities sector referred to.
15	Malawi	No	"Utilization of IT infrastructure" was given the lowest priority among activities for "Development Goal 5.4 - Create a Science and Technology driven economy."
16	Mali	Yes	Specific chapter independently appropriated for ICT issues is not found. However, the Government of Mali strategically puts stress upon (1) infrastructure development that ensures universal accessibility to telecommunication service countering the landlocked characteristic of the country; (2) regular follow-up of the PRSP process by using ICT tools.
17	Mauritania	No	As one of the mid-term economic development goals, promotion of services sector, which should continue to expand because of sustained and significant private investment in tourism, telecommunications, and trade, is stressed. However, there is no direct relationship explained, as in some other countries' PRSPs, between IT development and poverty reduction strategies.
18	Mozambique	Yes	Technological enhancement is placed as a stimulus for encouraging foreign direct investment and IT development is introduced as a programme of complementary measures.
19	Nicaragua	No	Telecommunication issues are discussed only in sections on (1) rural development (necessity of infrastructure) and (2) public sector reform.
20	Niger	Yes	ICT will be strategically utilised for establishing good governance and capacity development.

No.	Country	ICT component/s (Y/N)	How is ICT referred in PRSP
21	Rwanda	Yes	The Government of Rwanda recognises the role that Information Communication Technology (ICT) can play in accelerating the socio-economic development of Rwanda towards an information and knowledge based economy.
22	Senegal	No	The Government admitted the importance of implementation of/catching up with new information technologies and telecommunication tools for the nation's sustainable economic growth.
23	Sri Lanka	Yes	Application of ICT is placed at one of central pro-poor growth strategies, backed with The National Telecommunication Policy.
24	Tajikistan	No	New information technologies are considered to be indispensable tools for social development (education & health sectors). And modernization of telecommunications is also regarded as a necessary condition for agricultural development especially in terms of having access to market information for producers.
25	Tanzania	No	Not at all discussed.
26	Uganda	No	Not at all discussed.
27	Vietnam	No	Information Technology is regarded as a tool to support public administration reform, and is brought up as part of specific tasks of socio-economic development.
28	Yemen	No	Not at all discussed.
29	Zambia	No	Almost not at all discussed (telecommunication development is considered to be one of components of infrastructure setup needed for establishing sustainable & competitive industrial environment).

#### ANNEX 2

# **Examples of ICT as a Separate Component in PRSP**

### Case 1 Albania

### PRIORITY PUBLIC FIELDS AND MEASURES

Infrastructure and vital services

40. Despite recent intensive developments, the sector of telecommunications suffers from a relatively low coverage and penetration level of fixed and cellular telephone services, high tariffs and unsatisfactory service quality. Being directly linked with the standard and quality of life, the telecommunications service and the information technology today represent a powerful means for growth, development, and modernization. These services have particular effects on the work of public administration, trade, banks, financial markets, education, health etc. The objectives for the development of the sector include: (i) deepening liberalization of the telecommunications sector, (ii) expansion of the services and (iii) improvement of quality. Priority public measures include: (i) privatization of the Albtelekom company; (ii) increasing the competition in the cellular telephony and the liberalization of competition in fixed telephony beginning from 2003; (iii) the extension of telecommunications service to rural areas; (iv) extension of Internet service to the education and training institutions and for business use; and (v) consolidation of the regulatory institutions.

### IV.F.4 TELECOMMUNICATIONS

- 259. The global information infrastructure, based on new information and telecommunications technologies with the use of optic fibres and satellite communications, creates conditions for the large-scale development of new services in the fields of public administration, trade, banks, financial markets, distance education, health care etc.
- 260. The inherited telecommunication services were incapable of coping with the new realities. The telecommunications and the postal service were separated in 1992, resulting in the establishment of the state-owned enterprise of Albtelekom. On basis of a Master Plan for the development of the sector and with the financial support of the EBRD and the donor countries, the telecommunications was subjected to a process of important changes, which led to a perceptible improvement in fulfilling the needs of the population and the businesses.
- 261. Important developments in the sector of telecommunications during this period include: (i) the approval of the legislation for the regulation of the telecommunications activity and the partial liberalization of the sector; (ii) the introduction and development of Internet; (iii) the establishment of an independent regulatory authority; and (iv) the stimulated involvement of the private sector in this industry.
- 262. As a result of the adopted measures, the level of penetration of the telephone lines during the past decade has increased at a satisfactory rate, from 5 lines per 1,000 inhabitants in the 1992-1993 years to

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30.5 lines in 1999. This service is provided by the state company Albtelekom. The Albtelekom network is integrated into the world telecommunication network through transmission facilities with underwater and land optical fibre, such as Trans Balkan Line (8<sup>th</sup> telecommunication corridor: Bari-Durres-Elbasan-Macedonia-Bulgaria-Turkey) and Adria 1 (Greece-Albania-Croatia-Germany). The commutation network is presently 80 percent digital, whereas the transmission network is 95 percent digital.

- 263. In 1995 the Albanian Government established a non-cable telephone service company, which was privatized in 2000. The delivery of the telephone service has also increased and become more massive and its range has been expanded with new services. A second license for the operation of the cellular telephony was issued through an open international tender.
- 264. The use of the Internet service has increased from 0.1 users for 10,000 inhabitants in 1995 to 0.3 users in 1999. The Albtelekom project for Internet includes the creation of an ISP at a national level, offering points of presence in the main cities. The Internet and telephony delivery service is liberalized and they are being presently supplied by: the Internet service by 12 private operators, whereas the telephony in the rural areas by 10 licensed private operators.
- 265. The objectives for the development of the sector include: (i) the deepening liberalization of the telecommunications sector, and (ii) the expansion of the services and the improvement of quality.
- 266. The priority public measures to be taken during this period include: (i) the privatization of the Albtelekom company; (ii) the liberalization and the introduction of competition in the fixed telephony beginning from 2003; (iii) the extension of Internet service to the educational and training institutions and for business use; and (iv) the consolidation of the regulatory institutions.

# Case 2: Gambia:

# Chapter 7: SPA II Priority Actions for 2002-2004

7.2 Cross-cutting Issues

7.15

Research and development of Information and Communication Technology (ICT) applications in development is a major priority of Government, and has resulted in the setting up of a Department of State to that effect. ICT application in Health, Government and Communications in Rural Areas will be systematically explored as an adequate strategy to improve service delivery through the introduction of telemedicine, e-government opportunities and development of rural telecentres.

# Case 3: Mozambique:

# IV. ACTION PLAN FOR THE REDUCTION OF ABSOLUTE POVERTY AND THE PROMOTION OF ECONOMIC GROWTH.

# B. OTHER AREAS OF ACTION

#### **TECHNOLOGY**

Introduction

266 The entire strategy for poverty reduction and economic growth (particularly the latter) is based on the assumption of a continual rise in efficiency/productivity of work processes. This, in turn, depends critically on the employment of specific technologies and adaptation and innovation over the long run.

Technology involves know-how, the capacity to organise and put into operation work processes, specific techniques, material means of production, and the circulation of relevant information. The employment, adaptation, innovation and growth of technologies depends on formal and informal learning, on the job training, and research and development, as well as diffusion of the same throughout the economy and society.

267 The present strategy contains important elements that can contribute to the necessary technological development. It is worth highlighting the following: research and extension activities for agriculture and rural development, fisheries, mining, and housing, that involve millions of small producers; business development measures to support micro, small-scale and medium size enterprises; measures in the area of infrastructure, particularly in energy and communications; and measures relating to technical and higher education. In should also be noted that a key element in the introduction and expansion of new technologies is the stimulus provided by direct foreign investment, an issue dealt with in the sections on macroeconomic policies.

Programme of Complementary Measures

268 Information technology

- 268.1 Main objectives: To expand access to computers and the internet for the rural population; expand knowledge of computers through educational systems.
- 268.2 Principal measures to be undertaken: Install computer centres in rural areas; install computer laboratories in secondary and technical schools and universities.

### Case 4: Rwanda:

### 4 THE POVERTY REDUCTION STRATEGY: SECTORAL ACTIONS

4.7 Cross cutting Issues: technology, gender, environment, imidugudu, HIV/AIDS, employment, capacity-building and inequality

**Technology** 

- 250. In most of the cases discussed above, Rwanda's economic growth will depend on technological transformation. We need to use available and emerging technologies in an imaginative way to suit our circumstances. This is particularly true in agriculture, where our strategy is based on the use of improved modern inputs, and in information and communications technology, where we aim to establish a comparative advantage.
- 251. The Government of Rwanda recognises the role that Information Communication Technology (ICT) can play in accelerating the socio-economic development of Rwanda towards an information and knowledge based economy. The emerging information revolution offers Rwanda a window of opportunity to leap-frog the stage of industrialisation and transform her subsistence economy into a service-sector driven, high value-added information and knowledge based economy that can compete on the global market.
- 252. The Government has therefore established the Rwanda Information Technology Agency (RITA) and developed a twenty- year strategy ICT-led socio-economic development framework and an integrated plan for 2001-5. This contains the following broad strategies:
  - To promote and encourage the development and utilisation of ICT within the economy and society

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- To transform Rwanda into an IT literate nation
- To improve the efficiency of the civil and public service
- To improve the information and communications infrastructure of Rwanda
- To transform the educational system using ICT
- To improve the human resource development capacity of Rwanda
- To develop a legal, institutional and regulatory framework to support ICT
- To promote social and cultural interaction within the society.

#### ANNEX 3

### Other References to telecommunications sector in PRSPs

Case 1: Telecommunications sector development as an "important factor for rural/agricultural development"

# Ethiopia

VII. Key Sector Development Policies and Strategies

7.1.8. Rural Telecommunications Development in Ethiopia

Although the introduction of telecommunications in Ethiopia dates back to 1894, it has remained under low level of development under different organizational structures. At present the Ethiopian Telecommunications Corporation (ETC) provides all the telecommunication services in Ethiopia. The objectives of ETC as stated in its establishment regulation of 1996 Article 5 are:

- To engage, in accordance with development policies and priorities of the Government, in the construction, operation, maintenance and expansion of telecommunication services;
- To provide domestic and international telephone, telex, telefax and other communication services.

Despite ETC's past efforts to expand the installed base, telecom density (the number of main lines per 100 inhabitants) is currently only about 0.6. Addis Ababa accounts for about 57.2 percent and other big towns account for 32.5 per cent of the total installed lines. 85 per cent of the population lives in rural areas where only 10.5 per cent of the telephones are installed. The level of service in the rural parts of the country is at best at a very low level and at worse non-existent. This illustrates how serious the telecommunications condition in Ethiopia is.

ETC also provides telephone services to the public by using public pay phones installed at various locations in major cities and towns. Public pay phones are the best facilities to make possible telephone access to a larger population very easily. As of March 2002, the number of coin and card-operated public pay phones stood at 1,444.

Accessibility may be defined by the average distance to access a telephone call station or by the number of localities that a single telephone call station serves. Even though the number of villages and communities within the country is not known, there are about 677 telephone call stations within the country covering a total land area of 1,200,000 sq. km and a population of about 67 million in July 2002.

a) The Importance of Telecoms for Rural Development

As is already stated, 85 per cent of country's population lives in the rural areas. The rapid development of the rural economy depends crucially on access to adequate telecommunication services. An efficient telecommunications infrastructure development in rural areas will contribute significantly to the balanced regional development, and rural-urban imbalances in terms of living conditions, access to

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education, health and other social services. The wide variety of services and applications that can be provided through telecommunications offer a number of opportunities for the rural population and contribute significantly to the fight against poverty.

# b) Next Three Year Plan for Rural Telecoms Development

In conformity with the Government's policy of Agricultural Development Led Industrialization (ADLI), ETC's next three-year telecom development strategy is geared towards the extension of telecommunication services to the rural parts of the country. The ETC has already started implementing its programs by using modern technologies such as digital radio and satellite. The plan is to extend the telecommunication services, basic telephone and data services, to all Woredas. Within the next three years, about 300 rural towns, mostly Woredas, will be provided with telephone services. This will improve access to telephone services in the rural part of the country. The next three-year plan also focuses on the improvement of the quality and reliability of the existing services.

# Case 2: Telecommunications sector development as "one of the components of infrastructure for economic growth"

# Senegal

### IV. POVERTY REDUCTION STRATEGY

4.1.10. Accompanying Measures

Private Sector Capacity-Building

129. The onus will be on enterprises to work toward the economic and social objectives of the poverty reduction strategy in their dialogue and consultation with the State and the social partners, in the context of a social charter among other things. With regard to infrastructure services in particular, such as water supply, electricity, telecommunications and transport, the State will complete the establishment of a regulatory framework conducive to development of private investment and poverty reduction.