



Do Governments Actually Believe that ICT Can Help Alleviate Poverty?

A Perspective from Poverty Reduction Strategy Papers (PRSPs)

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Inside

- What role does ICT play in the broader development context?
- Why examine ICT treatment in PRSPs?
- How do countries in the Asia-Pacific region treat ICT in their PRSPs?
- Chart summarizing ICT initiatives highlighted in country PRSPs
- Conclusion
- Additional Reading

APDIP e-Notes present an analytical overview of specific issues related to information and communication technologies for sustainable human development in the Asia-Pacific region. APDIP e-Notes are developed by the United Nations Development Programme's Asia-Pacific Development Information Programme (UNDP-APDIP) based at the UNDP Regional Centre in Bangkok, Thailand. For more information, visit <http://www.apdip.net> or contact info@apdip.net

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Summary

With the United Nations Millennium Development Goals Summit +5 coming up in September and the World Summit on the Information Society (WSIS) in November, it is timely for developmental agencies to revisit some of the key issues and developments that have taken place in the integration of information and communication technologies (ICT) within the larger scheme of national developmental policies.

This note examines the treatment of ICT in Poverty Reduction Strategy Papers (PRSPs) of Asia-Pacific countries. PRSPs serve as a good starting point because they direct the focus of World Bank and International Monetary Fund (IMF) concessional lending. Countries have more incentive to prioritize their development needs rather than produce a laundry list of reforms. Although only eight countries in the region have completed PRSPs (Bangladesh, Bhutan, Cambodia, Lao PDR, Mongolia, Nepal, Pakistan, and Viet Nam), the results in relation to the use on ICT were revealing and insightful.

There is a clear demonstration by governments that ICT can effectively help alleviate poverty, although the manner in which it is used varies. All eight countries have plans to develop ICT as a sector and use ICT as tools to achieve other PRSP goals in education, health, employment, monitoring poverty, disseminating information, facilitating government services, and disaster management. Across the board, countries are planning to develop management information systems to improve public sector governance and service delivery. Many governments also used ICT to disseminate information on health, government programs, employment opportunities, and disaster relief efforts. Efforts that incorporate ICT on the ground generally fall into the categories of education and increasing market access. Mongolia has the most comprehensive program to integrate ICT into the education system. Overall, Mongolia, Cambodia, and Lao PDR have outlined the most concrete actions of using ICT in their poverty alleviation strategies.

While examining PRSPs was a useful starting point, it is important to keep in mind that PRSPs by themselves do not translate policy into concrete action. Countries need a combination of national strategy, political will, financial resources, and technical capacity to properly use ICT as tools for poverty alleviation. PRSPs are a good indicator of the direction the government hopes to progress. The next step would be to look at substantive indicators to evaluate actual progress.

What role does ICT play in the broader development context?

While the information revolution has transformed modern day society, those left behind are caught in the Digital Divide.¹ This is a relevant problem in the development context because ICT can play important roles both as an industry sector to drive economic growth and as an enabler to help achieve other goals in areas such as education, health, and governance² (see Figure 1).

However, large-scale ICT adoption has not been widespread.³ Problems such as limited access, lack of ICT literacy, and undeveloped local content have hindered many national efforts. Still, international developmental organizations are persisting on integrating ICT with macro development efforts because it is an effective conduit to quickly and efficiently transport large amounts of information for multiple purposes.

¹ Digital Divide is generally defined as the widening gulf between the 'haves' and the 'have-nots' in the world of information technology.

² The National ICT Strategy framework is adopted from p.19 of the "Final Report of the Digital Opportunity Initiative, "Creating a Development Dynamic."

³ "Information and Communication Technologies for Poverty Alleviation", Roger W. Harris, UNDP-APDIP e-Primer for the Information Economy, Society and Polity, 2004. <http://eprimers.apdip.net/series/info-economy/poverty-toc>



Figure 1

Why examine ICT treatment in PRSPs?

Governments generally understand that ICT can play a role in their country's economic development and poverty alleviation efforts. However, given limited resources and a long list of development needs, actual investment and use of ICT can vary greatly. In 2003, the Organization for Economic Cooperation and Development (OECD) conducted a study that examined how ICT were mentioned in the existing Poverty Reduction Strategy Papers (PRSPs)⁴. The rationale was that since PRSPs are the basis for directing World Bank and IMF concessional loans, analyzing the treatment of ICT in PRSPs can serve as an indicator of how governments perceive ICT in the broader poverty alleviation context.

The study searched for the words "telecommunications," "ICT," and "information technology" and divided the results into three categories: 1) countries that mentioned ICT as a strategic component in poverty reduction; 2) countries that mentioned the telecommunications sector as an "important factor in rural/agricultural development" but not as a strategic priority; and 3) countries that did not mention ICT at all.

The results were enlightening, as they showed that despite promising pilots and increasing dialogue in ICT for development, very few governments actually viewed ICT as part of their poverty alleviation strategy. Only four of the 21 countries fell in the first category of mentioning ICT as a strategic component (Albania, Gambia, Mozambique, and Rwanda). 13 countries were in the second category, and four countries were in the third category of not mentioning ICT at all.

How do countries in the Asia-Pacific region treat ICT in their PRSPs?

In July 2005, UNDP-APDIP conducted a similar study looking at PRSPs in the Asia-Pacific Region because from the region, only Viet Nam was included in the OECD study. Eight countries in the region have now completed PRSPs: Bangladesh, Bhutan, Cambodia, Lao PDR, Mongolia, Nepal, Pakistan, and Viet Nam. The study searched for the words "ICT," "telecommunication," "communication," and "information" in the PRSPs and compiled relevant results under two categories: ICT as a sector and ICT as an enabler.

⁴ ICT in Poverty Reduction Strategy Papers as of January 2003. OECD. <http://www.oecd.org/dataoecd/53/54/2499909.doc>

All eight countries had plans to develop their respective ICT sector as part of their overall infrastructure development plan, through actions such as regulatory reform, extending coverage, and increasing private sector participation. In addition, Mongolia plans to launch an information technology incubator and Pakistan plans to launch a software technology park in Islamabad, Lahore, and Peshawar.

All eight countries also used ICT to various degrees as an enabling tool to achieve other PRSP goals. Efforts include using ICT in education, health, employment, monitoring poverty, disseminating information, facilitating government services, and disaster management. The most common way to use ICT to achieve PRSP goals is developing management information systems (MIS). Bangladesh, Cambodia, Lao PDR, Mongolia, and Nepal plan to use MIS to improve public sector governance and service delivery such as land management, public finance, procurement, and tax collection. Bangladesh, Mongolia, and Nepal plan to use MIS for better disaster management. Pakistan and Bhutan plan to establish and strengthen their health MIS. Information dissemination is also a common use. With the exception of Nepal, all eight countries want to use ICT to disseminate information on issues such as health, government programs, employment opportunities, and relief efforts.

Other innovative efforts include the following:

- Provide credit and support services for firms in ICT industries (Bangladesh)
- Establish an information system for firms to access bank credits (Cambodia)
- Provide market information in agriculture between producers, wholesale, and retail buyers (Lao PDR)
- Develop an Electronic Communication Network and Alternate Trading System for less costly trade execution in capital markets (Pakistan)

The chart below summarizes the ICT initiatives highlighted in the PRSPs of each country.

Conclusion

Since the OECD study in 2003, more governments have completed PRSPs and have incorporated ICT use in strategic ways.⁵ The eight countries examined illustrate that to varying degrees, governments in the Asia-Pacific region do believe that ICT is an effective tool for poverty alleviation, whether it is through MIS, information dissemination, education, or increasing market access. Overall, Mongolia, Lao PDR, and

⁵ It is important to note that not having a PRSP does not represent less emphasis towards poverty reduction or ICT. India, for example, specifically recommends ICT as a strategy for improving adult literacy, teacher training, development of professionals, and secondary to higher education in Volume II of the 10th Plan Document. (India Planning Commission: <http://planningcommission.nic.in/plans/planrel/fiveyr/welcome.html>)

Cambodia have incorporated ICT in their poverty alleviation strategies in the most concrete way, both as a sector and as an enabling tool. They go beyond establishing backend management systems to actually using ICT in the field. Mongolia in particular, emphasizes the need to gain ICT literacy by planning to mainstream ICT into the education curriculum, organize schemes to provide basic ICT knowledge to the public, support ICT training through tax and economic policies, develop distance learning, and support use of e-textbooks. On the contrary, while Bhutan and Nepal do mention ICT both as a sector and as an enabler, it is mentioned in the context of a laundry list of initiatives with little mention of specific actions.

Examining PRSPs is only the first step in understanding how countries are integrating ICT into their poverty alleviation strategies. Beyond ambitious plans, the main challenge will be to coordinate political will, financial resources, and technical expertise to transform policies into action. The next step would be to use concrete indicators to evaluate the gap between policy and actual implementation. For now, at least countries are starting to work towards the right direction.

~ Carol Chyau, UNDP-APDIP

Additional Reading

Asia Forum on ICTs and e-Strategies. Session I – ICTs, PRSPs, and MDGs, by Tariq Banuri. 2003.
<http://www.apdip.net/projects/2003/asian-forum/docs/papers/session1.pdf>

Extract of ICT-Related Content from PRSPs in the Asia Pacific Region
http://www.apdip.net/resources/ict_shd/poverty/Extract_of_PRSPs.pdf

ICT-focused Regional Human Development Report (RHDR). 2005.
<http://www.apdip.net/projects/rhdr/>

ICTs for Governance and Poverty Alleviation in India. 2003.
<http://www.apdip.net/projects/2003/in/>

UNDP-APDIP Collection of Resources on ICT and Poverty Reduction
http://www.apdip.net/resources/ict_shd/poverty/

Development Gateway ICT for Poverty Reduction and Growth Resources
<http://topics.developmentgateway.org/ict/rc/BrowseContent.do~source=RCContentUser~folderId=3082>

Eldis ICTs and Poverty Reduction Resources
<http://www.eldis.org/ict/poverty.htm>

Upscaling Pro-Poor ICT Policies and Practices: A review of experience with emphasis on low-income countries in Asia and Africa, by Richard Gerster and Sonja Zimmermann. 2005.

<http://www.apdip.net/apdipenote/2.pdf>

<http://www.apdip.net/documents/poverty/initiatives/sdc-mssrf01012005.pdf>

List of Completed PRSPs
<http://www.imf.org/external/np/prsp/prsp.asp>

Examples of ICT in National Plans as of January 2003. OECD.
www.oecd.org/dataoecd/53/53/2499940.doc

ICT in Poverty Reduction Strategy Papers as of January 2003. OECD.
<http://www.oecd.org/dataoecd/53/54/2499909.doc>

Integrating ICT in Development Programs. 2003. OECD.
<http://www.oecd.org/dataoecd/2/57/20611917.pdf>

Digital Dividends for the Poor: ICT for poverty reduction in Asia, by Stuart Mathison. 2003
<http://www.apdip.net/documents/poverty/misc/gkp31122003.pdf>

i4D Hails UNESCO's Efforts to Use ICT for Poverty Reduction. UNESCO.
http://portal.unesco.org/ci/ev.php?URL_ID=16232&URL_DO=DO_TOPIC&URL_SECTION=201

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Chart summarizing ICT initiatives highlighted in country PRSPs

	ICT as a Sector	ICT as an Enabler				
Country	Develop ICT as a Sector	Education	Health	Employment/ Commerce/Market Access	Monitor Poverty & Disseminate Information	Facilitate Gov. Services/Disaster Management
Bangladesh	(1) Improve telecom infrastructure (2) Improve legal and regulatory reform (3) Create enabling environment for technical acquisition.	(1) Develop ICT literacy through education system (2) Develop ICT training facilities (3) Promote e-library.	Improve communication system, especially radio & TV to disseminate information.	(1) Promote ICT sector to generate employment (2) Promote ICT in banking services (3) Provide credit and support services for firms in ICT industries.	(1) Use mass media to share information on good governance and poverty reduction strategies (2) Ensure women receive information on ICT benefits.	(1) Use ICT to simplify land management system (2) Use ICT for disaster management (3) Promote e-governance (4) Use ICT to enhance procurement.
Bhutan	Communication is one of the priorities to reduce poverty.		(1) Strengthen health management information system (2) Promote ICT in health through telemedicine and medical transcription.		Establish a Poverty Information Network as the IT backbone of the Poverty Monitoring System.	
Cambodia	(1) Expand quality and coverage of telecom, TV, and radio network (2) Encourage private investment (3) Establish national standards.	ICT training for civil servants.	Establish nutrition information system.	(1) Develop a directory of enterprise, computerized registration system, and website to promote local products (2) Establish an information system for firms to access bank credits.	(1) Establish a Statistics Information System (2) Disseminate National Poverty Reduction Strategy via email, internet, TV, mobile shows, and posters (3) Establish food insecurity vulnerability mapping system (4) Establish agriculture statistics and market information system.	(1) Enhance MIS for accounting, taxation, auditing, and budgeting (2) Establish a meteorological and hydrological data acquisition and forecasting system to provide real time information on floods and droughts.

	ICT as a Sector	ICT as an Enabler				
Country	Develop ICT as a Sector	Education	Health	Employment/Commerce/Market Access	Monitor Poverty & Disseminate Information	Facilitate Gov. Services/Disaster Management
Lao PDR	(1) Extend telecom coverage to poorest districts (2) Encourage investment in computer technology.	(1) Encourage investment in ICT for education and facilitate Internet use in remote and poor areas (2) Promote distance education at National University of Lao PDR (3) Develop basic ICT skills training through community learning centers (4) Develop an education MIS.	Initiate health broadcasts on local radio stations, materials for TV channels, and videos for public distribution.	(1) Provide market information in agriculture between producers, wholesale, and retail buyers throughout the region (2) Provide information on investment opportunities and facilitates for trade through mass media and ICT networks.		(1) Create communication networks across the government (2) Use Geographic Information System and ICT within local area network (3) Develop revenue collection system.
Mongolia	(1) Establish appropriate legal and regulatory framework, develop key ICT infrastructure, establish economic and business framework to use ICT (2) Develop and export e-information processing services (3) Create a fund for universal service (4) Privatize Mongolia Telecom (5) Upgrade and improve TV and radio studios and broadcasting systems (6) Create favorable environment for ICT related private sector development (7) Create information technology incubator (8) Expand and digitize Internet services (9) Encourage ICT adoption through fiscal/tax policies.	(1) Mainstream IT into education curriculum (2) Organize schemes to provide basic IT knowledge to the public (3) Support IT training through tax and economic policies (4) Develop distance learning (5) Support use of e-textbooks. (6) Support e-learning.	(1) Use radio and other ICT to disseminate information and organize training activities (2) Create enabling environment for telemedicine.	(1) Create information network on labor market (2) Establish conditions for sustainable job creation in ICT (3) Create tourism websites and database of tourism information (4) Develop e-commerce and information and domestic/foreign markets.	Create MIS for public services to improve decision-making and governance.	(1) Develop software and database to manage procurement and data processing (2) Create a unified computer network for accounting, auditing, and inspection (3) Create a civil service human resources management system (4) Create risk prevention information system and improve communication system for disaster management.

	ICT as a Sector	ICT as an Enabler				
Country	Develop ICT as a Sector	Education	Health	Employment/ Commerce/Market Access	Monitor Poverty & Disseminate Information	Facilitate Gov. Services/Disaster Management
Nepal	(1) Open up telecom sector for private investments (2) Improve telecom facilities (3) Push legal and regulatory reform.			(1) Use appropriate ICT to enhance competitiveness in trade, tourism, and industrial regime (2) Use ICT to help develop SMEs (3) Use telecom facilities to increase access to markets.	Develop MIS to monitor progress, resources spent, and impact.	Develop national geographic information system and computerized land information system to facilitate tax collection and land reform.
Pakistan	(1) Increase private sector participation (2) Strengthen regulatory body (3) Launch a software technology park in Islamabad, Lahore and Peshawar.	Provide free Internet connection to public sector universities.	Improve the Health Management Information System and develop a Disease Surveillance System.	(1) Develop Electronic Communication Network and Alternate Trading Systems for more efficient and less costly trade execution in capital markets (2) Considers ICT as one of the main engines of growth for employment.	(1) Use National Education Management Information System to monitor and evaluate programs (2) Use web pages to disseminate information on government policies.	
Viet Nam	(1) Upgrade ICT infrastructure to digital technology (2) Improve system to broadcast radio and TV (3) Improve regulatory environment (4) Develop information industry, software, and ICT related products for export.				Enhance communication between State and local communities through mass media, community radios, and videos.	(1) Use ICT to improve public services (2) Create an information system to analyze, forecast, and evaluate external borrowings.