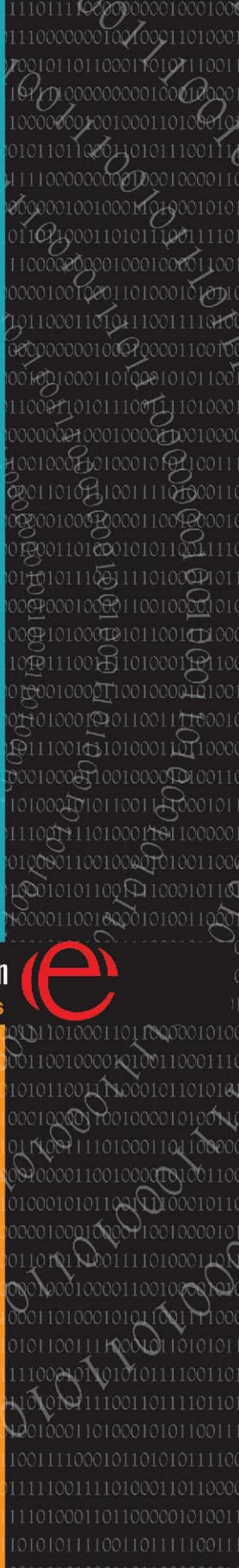




The South Asia Region ICT Strategy and Implementation Plan
South Asia — Finance and Private Sector Regional Strategy Series



THE WORLD BANK





Strategy & Implementation Plan

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The South Asia Region ICT Task Force





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Acronyms and Abbreviations

AAA	Analytic and Advisory Work
CAS	Country Assistance Strategy
CITPO	Policy Division of GICT
GICT	Global Information and Communication Technologies Department
ICT	Information and Communication Technology
IFC	International Finance Corporation
infoDev	Information for Development Program
I-PRSP	Interim Poverty Reduction Strategy Paper
ISG	Information Solutions Group
ISGIA	ISG Informatics Advisory Services
IT	Information Technology
LEN	Lending
MIGA	Multilateral Investment Guarantee Agency
NDP	National Development Plan
PRSP	Poverty Reduction Strategy Paper
SAF	<i>Securing Afghanistan's Future</i>
SAR	South Asia Region (of the World Bank)
SARFM	South Asia Financial Management Unit
SARPS	South Asia Procurement Services Unit
SASAR	South Asia Agriculture and Rural Development Sector Unit
SASEI	South Asia Energy and Infrastructure Unit
SASES	South Asia Environment and Social Sector Unit
SASFP	South Asia Finance and Private Sector Development Sector Unit
SASHD	South Asia Human Development Sector Unit
SASPR	South Asia Poverty Reduction and Economic Management Sector Unit
WBG	World Bank Group
WBI	World Bank Institute

The South Asia Regional ICT Strategy

BACKGROUND

In 2004, the South Asia Region¹ of the World Bank commissioned the development of a Regional Strategy for Information Communication Technologies (ICT). The main objective of the strategy was to identify ways in which the Bank in the South Asia Region can assist its partner countries in achieving their economic development goals through a more effective use of ICT.

The main driver behind the strategy was the realization that the Bank's ICT portfolio has been increasing over the past years, particularly in the South Asia Region where 40% of the project portfolio involves significant investments in ICT. The need for a strategy stems from the fact that the Bank was eager to develop a more comprehensive and coordinated approach in this area, in order to better serve its clients' needs.

As part of the background analytical work for this strategy, the project team took a comprehensive approach of reviewing the policy documents and national development plans for each of the eight countries represented in the region. This analysis was done primarily to assess the nature of the demand that our clients had expressed in their national development policy documents. This analysis was then compared to a review of the Bank's lending portfolio in the region, to assess the nature of the ICT assistance that the Bank has been providing.

Based on the analysis of these assessments, an ICT for Development framework was developed to strategically address our clients' needs in a more comprehensive manner.

The document is divided into two main sections. The first section describes the strategy and highlights the analytical work that was done as background to the strategy. The second section describes the implementation plan, outlining a 3 year approach to implementing the strategy and the units that will be responsible for implementation.

¹ The World Bank South Asia Region covers eight countries, namely Afghanistan, Bangladesh, Bhutan, India, the Maldives, Nepal, Pakistan and Sri Lanka. The total project portfolio in the region amounts to approximately USD 18.2 billion.

INTRODUCTION

“ICT for development” has become a core development topic. Many developing countries have already recognized that in a few years information and communication technology (ICT) for development will no longer be discussed as a separate topic but as an integral part of all economic development issues, much as access to electricity is today. This strategy aims to develop a formalized approach that would allow the World Bank’s South Asia Region (SAR) to provide more focused and comprehensive assistance to our client countries.

The World Bank Group ICT Sector Strategy delegates the implementation of the strategy to the regional units. This action plan aims to build on the World Bank Group’s strategy by proposing a specific approach to addressing some of the internal organizational issues constraining the development of a comprehensive ICT work program.

There is a clear need for an internal strategy and standard on ICT for development. A question now confronting both the World Bank as a whole and the South Asia Region is, “How can the use of development related technologies be better mainstreamed into the Region’s work program?” And “How can the region be more responsive to our clients’ ICT needs”. To answer these pressing questions requires considering a few critical issues, such as:

- What do our clients want?
- What have our clients been doing to pursue their ICT related goals?
- How have they incorporated the use of ICT into their overall economic development plans?
- How has the WB and the SAR responded to this demand?
- How should the SAR respond to it’s clients needs in the future?

All of these questions were analyzed and covered in detail in a separate background document. This document summarizes the highlights of that analysis and prescribes a detailed strategy to respond to our clients’ needs.

What Do Clients Want?

There are two main indicators of client demand for ICT-related interventions. The first is the **policy statements** made by governments in national development plans, Poverty Reduction Strategy Papers (PRSPs), ICT or telecommunications strategies, or other policy documents. Although many of these policy statements are general, they do provide a sense of the motivation and vision behind such interventions. The second indicator of

client demand, particularly as it relates to the World Bank, is the **World Bank projects** now being implemented in South Asia.

Policy Statements

All eight of the World Bank's client countries in South Asia have explicit ICT strategies. Although these strategies vary in comprehensiveness and approach, they all recognize that ICT for development is an important tool for achieving economic objectives. Many of the ICT strategies recognize the three pillars of ICT development—skilled labor, information and communication infrastructure, and legal and regulatory framework—and describe the use of these pillars to achieve specific economic objectives set by the government, such as developing the ICT sector or introducing e-government (see annex 1).

Most countries in South Asia refer in their Poverty Reduction Strategy Paper (PRSP) to specific cross-sectoral ICT applications to achieve economic development goals. The PRSPs tend to be the best indication of a government's recognition of the potential effect of ICT applications in achieving sector goals, particularly as they relate to reducing poverty. But a basic comparison of South Asian countries' PRSPs (or national development plans) with the World Bank's Country Assistance Strategies for those countries shows that these strategies often fall short in recognizing those ICT applications, making little or no mention of using ICT in achieving the objectives they outline (see annex 2).

World Bank Projects in South Asia

A review of the portfolio of World Bank–financed projects in South Asia—both active projects and those in the pipeline—revealed significant work being done in ICT for development:

- **Around 40% of the region's portfolio consists of projects with significant ICT components.**² In the 91 active or pipeline projects that have significant ICT components, applications range from using radio navigation aids in transport projects to modernizing ministerial functions in national government.
- **Around 61% of the region's projects with ICT components involve some form of e-government (figure 1).** These approximately 50 projects

² ICT components range from basic investments in computers for upgrading ministerial functions to such sophisticated applications as telekiosks or using geographic information systems for survey work. All projects with a component mentioning the use of such technologies were reviewed as part of the background work for this strategy.

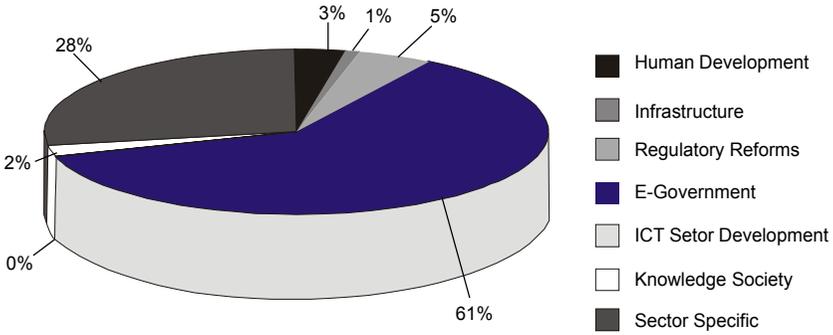


Figure 1: E-government is the biggest focus of ICT components in World Bank projects in South Asia

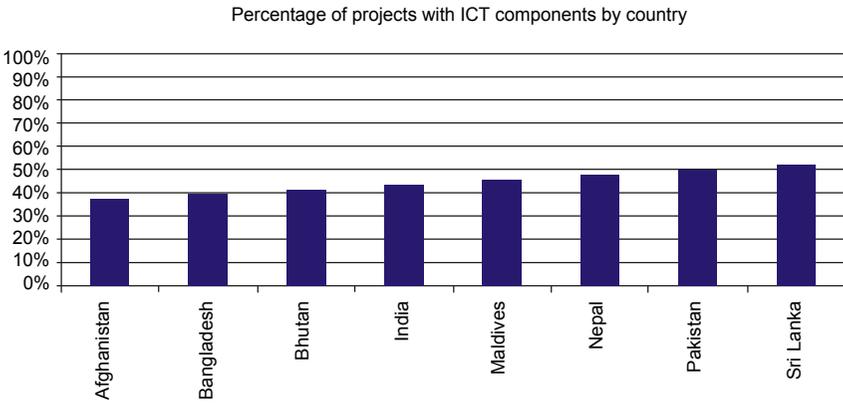


Figure 2: A big share of World Bank projects in South Asia have ICT components

involve e-government initiatives ranging from basic institution building to complex tax and customs modernization efforts.

- Of the three large countries in the region (India, Bangladesh, and Pakistan), Bangladesh has the biggest share of ICT-related projects in its portfolio (43%) (figure 2). These 18 active and pipeline projects encompass seven sectors, with a heavy focus on e-government initiatives.
- Of the region’s three medium-size countries (Afghanistan, Nepal, and Sri Lanka), Sri Lanka has the largest share of ICT-related projects in its portfolio (52%). The 12 active and pipeline projects cover seven sectors, again with a substantial focus on e-government.
- Of the two small countries (Bhutan and the Maldives), the Maldives has the most ICT-related projects as a share of its portfolio (100%). The two projects are in health and education.

A few examples illustrate the range of ICT components in World Bank projects in South Asia. In Bangladesh the Economic Management Technical Assistance Program, which has as one of its main aims to improve the use of ICT in government, is deploying ICT in selected ministries and agencies and providing necessary training to government officials. In Sri Lanka the Central Bank Strengthening Project is supporting fundamental restructuring and reorganization of the Central Bank by financing ICT needed for mission-critical operations. And in the Indian state of Maharashtra the Health Systems Development Project aims to improve the performance of health care systems by deploying ICT in hospitals and training health care staff in its use.

What are the Key Components of the Strategy?

The following are considered the key components of a sound foundation for the eSAR strategy, based on the analysis covered in the background document for this report.

- **Coordination and Management.** Given the complexity of ICT related projects and their dependency on many cross sectoral issues such as literacy/skilled labor, financing, infrastructure, public sector capacity, private sector inputs, etc. there is a need for better coordination amongst the various WB sector units.
- **Internal Capacity Building.** A key element of delivering quality service to our clients is the ability of the regional Task Managers to diagnose and develop well structured projects incorporating the use of these technologies. This will require better understanding of the technologies and how they can be best integrated into the projects to achieve the stated development goals. Internal training initiatives will be required to ensure that Task Managers have the appropriate skills for these type of projects.
- **Clear roles and responsibilities.** Given the cross-cutting nature of ICT related issues, and the overlap and interdependency on many sector priorities, there needs to be a clear mapping of the roles and responsibilities for each sector unit, in order to ensure all the ICT related concerns are addressed in an efficient and comprehensive manner.
- **Proper Monitoring and Evaluation Mechanisms.** In order to ensure the effectiveness of not only this strategy but also any projects developed based on this strategy, proper M&E mechanisms must be developed and incorporated into all ICT related projects.
- **Dedicated Research and Development.** In order to ensure that best practices are being applied in an appropriate manner, dedicated teams for research and development should be created to develop and disseminate

best practices to project teams. The region should also take advantage of external partnerships with other institutions already working in this area.

Based on these principles it is clear that the **World Bank's South Asia Region must approach ICT development in a much more coordinated and comprehensive way**. The Region's strategy for ICT—the eSAR strategy—should be based on the ICT Development Framework³, which provides a comprehensive approach to ICT development (figure 3; see also chapter 2 of the background document for this strategy).

What New Initiatives are Under Way?

The South Asia Region has become increasingly involved in fully integrated ICT-related projects. That work began with the E-Sri Lanka Development Project (box 1). While the E-Sri Lanka project is still at an early stage, it has already produced lessons, and some of those are being incorporated into a proposed Bank project to support integrated e-government in India, the e-Bharat project in support of Government of India's National E-Governance Plan (boxes 2 and 3). Both of these projects illustrate some of the challenges that the South Asia Region faces in addressing the issues in ICT for development—and both have helped lay the foundations for the eSAR strategy.

What should the Region do? The eSAR Strategy

The goal: The application of best practices in a formalized manner.

To address some of the inadequacies of the South Asia Region's current approach to ICT for development, the eSAR strategy envisions a two-pronged approach: **learning by doing**—a bottom-up approach, analyzing previous responses to client demand and capturing the lessons that have emerged from those responses—and “e” **operational tool pilots**—a top-down approach, responding to client demand by developing more formalized approaches (figure 4).

- **Learning by doing.** The South Asia Region's already extensive involvement in ICT for development offers an important opportunity to capture the learning from its experience by developing more practical and appropriate best practice frameworks. These frameworks will allow better dissemination of best practices and enable the Region to develop better mechanisms for

³The ICT Development Framework was developed as part of the background work for this strategy. It provides a comprehensive mapping of the various areas covered by the ICT for development approach.

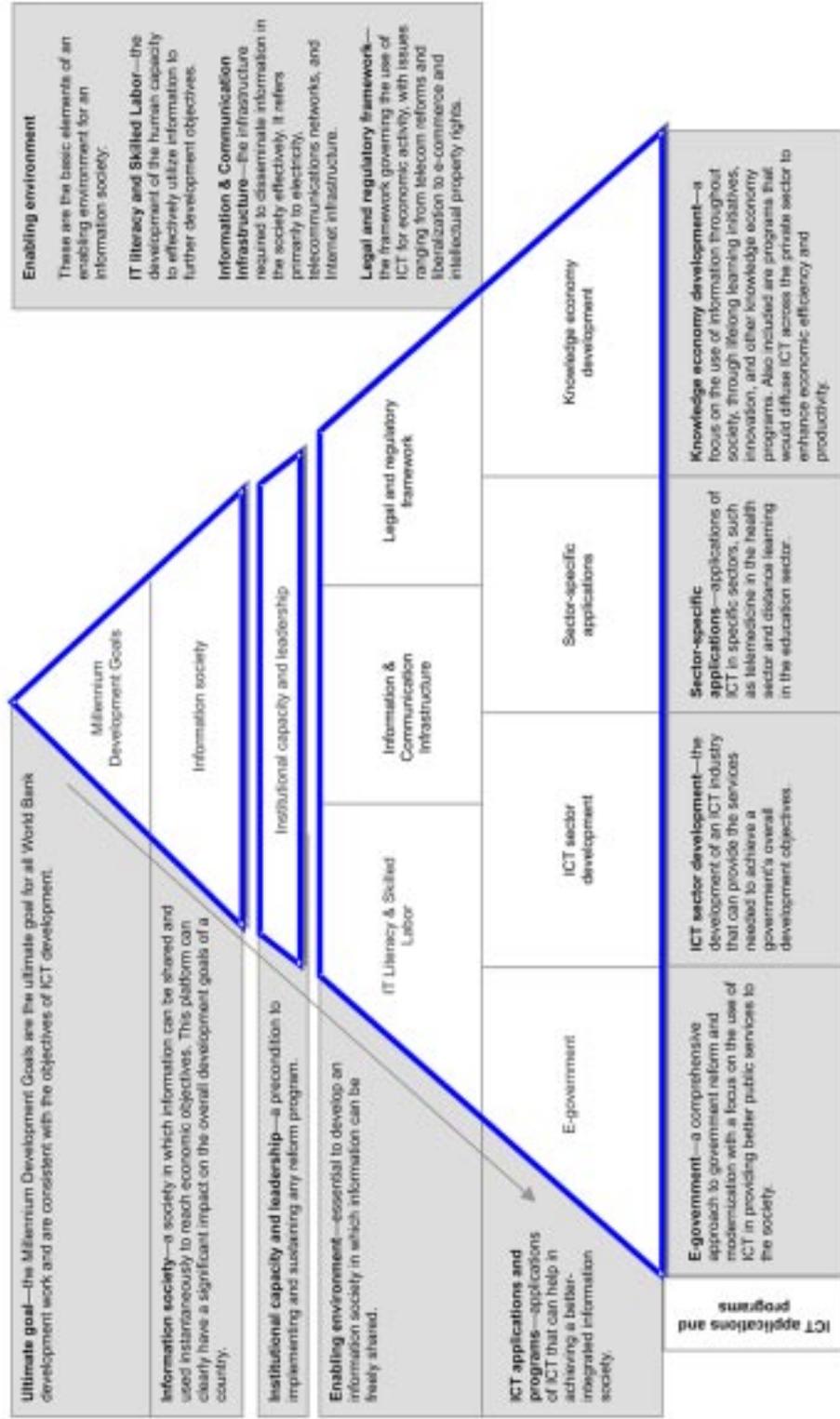


Figure 3: The ICT Development Framework

Box 1. E-SRI LANKA: SOUTH ASIA'S LARGEST INTEGRATED ICT PROJECT

The E-Sri Lanka Development Project—approved in November 2004, with the International Development Association (IDA) providing \$53 million of the \$83 million in financing—encompasses ICT-related activities throughout the country. This ambitious project has six main components:

- ICT Policy, Leadership, and Institutional Development Program.
- ICT Human Resource Development and Industry Promotion Program.
- Regional Telecommunications Network Program.
- Telecenter Development Program.
- Reengineering Government Program.
- E-Society Program.

Most of the resources are being devoted to modernizing government services and improving access to information infrastructure and services for the most vulnerable communities in the country's south and northeast.

Smaller components feature approaches based on recent best practices. These include smart subsidies to roll out telecenters in remote rural areas as well as the networks on which they depend, and a community-driven approach to support innovative ideas for improving living standards through ICT use at the village and community levels. The project also supports ICT education and human resource development. And it supports content development for local use, recognizing the public good aspects of such efforts.

Implementing the country's ICT strategy required a choice between establishing a strong centralized unit to push the reforms or using a decentralized approach aimed at strengthening ICT units in key line ministries. Sri Lanka ultimately decided on the first model and passed legislation in late 2003 establishing the ICT Agency. The agency's board represents key stakeholders, including the private sector, nongovernmental organizations, the Ministries of Finance and Education, and academia. The project itself takes a broad participatory approach, involving a wide variety of stakeholder groups in each of its programs.

The project confronts many risks, including those relating to the phasing of components. Without good content, for example, local users will place little value on access to information, and rural telecenters will struggle to become relevant and financially sustainable.

To ensure that outputs are measured, the project teams have established an elaborate system for monitoring and evaluation by the private sector. The system includes a participatory approach, a results-based framework, and timely feedback to allow the project to adjust course during implementation.

monitoring and evaluating ICT-related projects. The strategy envisions eventually using these frameworks as the basis for learning programs to help improve internal capacity within the region, in each area of the ICT Development Framework.

- **“e” operational tool pilots.** The implicit (and sometimes explicit) client demand expressed in policy documents suggests that the South Asia Region should invest in developing, on a pilot basis, best practice frameworks for two of the more important areas of the ICT Development

Box 2. E-SRI LANKA: LESSONS LEARNED SO FAR

Although the E-Sri Lanka Development Project remains in the launch phase, it is not too early to distill some key lessons from the process.

Broad and high-level political buy-in. The project had high-level political support from the start. Early in the preparation stage the prime minister signaled his commitment to the project by personally opening the E-Sri Lanka conference. The project not only secured high-level political commitment; it also had bipartisan support. Even after a change in government early in 2004, the project remained firmly on the reform agenda.

Central backing. Early on, some observers suggested housing the E-Sri Lanka project in the Ministry of Science and Technology. Later, others suggested housing it in the Ministry of Education. Both options would have limited the project's effectiveness and impact. As a cross-cutting and overarching initiative, the project needs to be housed in a central ministry responsible for leading the reform program across government. In the end the project made its home in the prime minister's office, gaining the prominence and political backing it needed to be effective.

Comprehensive effort. Earlier ICT initiatives failed because they followed piecemeal approaches to ICT development. As a cross-cutting theme, ICT requires a broad, integrated response. And ICT initiatives in government, for example, rely primarily on a political willingness to improve government and only secondarily on ICT hardware and software. To succeed, ICT-related reforms must therefore be based on a solid platform of reform with strong political support.

Professional management. To be successful, an ICT program needs competent staff from a profession whose skills are in strong demand. That poses a challenge for most governments, even those in industrial countries: how to attract such professionals to employment in the government, which can rarely offer the salaries and flexible working conditions they normally enjoy in the private sector. Creating an independent ICT agency is one solution, but it is not without problems. It can raise questions, opposition, and hostility from other parts of government, which could undermine the program's performance.

Cross-sectoral teamwork in the World Bank. The preparation of the E-Sri Lanka project showed that cross-sectoral teamwork in the World Bank is also key to successful ICT projects. Regional units with staff experienced in project preparation are best placed to lead such initiatives. But they need to work closely with staff from the Information Solutions Group, the Global Information and Communication Technologies Department, and the country management unit to capture their technical knowledge and ensure that the project fits into the broader work program for the country.

Research and development of best practices. As an innovative and path-breaking project, the E-Sri Lanka project could draw on only limited research and development of best practices in formulating an appropriate approach. But the growing appeal and importance of comprehensive, highly centralized ICT-related projects like E-Sri Lanka will lead to an increasing need for best practice frameworks, to provide project managers with a better understanding of how to structure and develop such projects in the future.

Monitoring and evaluation. The E-Sri Lanka project's innovative and path-breaking nature also leads to a crucial need for solid monitoring and evaluation—to evaluate piloted approaches, allow timely adjustments, and feed into learning modules and toolkits to inform future ICT projects. Indeed, the project is already helping to guide the National E-Governance Program in India (see box 3).

BOX 3. THE NATIONAL E-GOVERNANCE PLAN IN INDIA

With the National E-Governance Plan (NEGP), India is embarking on the next phase of its national ICT strategy. The plan envisages a number of mission-mode projects at the central and state government levels, supported by training, infrastructure, core policies, program management, and technical assistance. While some projects are to be implemented by a line ministry or department, others are integrated projects spanning multiple ministries. Part of the government's broader good governance agenda, NEGP provides an opportunity for the World Bank to assist in addressing widely recognized governance problems across sectors and administrative levels of government.

The World Bank's proposed support project focuses on components with a special impact on the poor and on rural communities, particularly in the less advanced states. NEGP is aimed at reducing poverty by improving the delivery of services to citizens, including the urban and rural poor, and by empowering all citizens, especially those in rural areas, to communicate directly with and make demands of their government. This pro-poor orientation that the World Bank seeks to foster reflects key priorities identified by its most recent Country Assistance Strategy for India.

Although the project is still in the development phase, the World Bank project team is already considering important lessons from the E-Sri Lanka experience.

Broad and high-level political buy-in. This is a prerequisite for any reform project, and complex ICT-related projects are no exception. NEGP clearly has high-level support: It is a major component of India's Tenth Plan and has been consistently endorsed by the prime minister's office since its conception in 2003. And e-governance ranks as a priority in the National Common Minimum Programme of the current United Progressive Alliance government.

Comprehensive effort. The project covers a broad range of services, from tax administration to the computerization of police stations throughout the country. NEGP has integrated central and state government initiatives into one project so as to generate cross-project and cross-state synergies, avoid inefficient overlaps, and take advantage of benchmarking based on common monitoring and evaluation.

Professional management. The Department of Information Technology has been playing a key role in developing NEGP. Several options for the program management directorate are being discussed, along with a sustainable structure for this body that will handle day-to-day issues of the program. The directorate's main roles would include implementing core policies, allocating and delivering technical assistance resources, and providing overall coordination, including fiduciary oversight. State-level program management directorates are also being considered.

World Bank coordination. Within the World Bank, task management for NEGP is shared by the South Asia Region's Finance and Private Sector Development Sector Unit and the Information Solutions Group, combining the operational and private sector skills of the first with the e-government application skills of the second. To deal with the project's multisectoral nature and provide comprehensive assistance to the client, the project team also includes staff of the Policy Division of the Global Information and Communication Technology Department as well as the South Asia Region's Poverty Reduction and Economic Management Sector Unit, Financial Management Unit, and Procurement Services Unit.

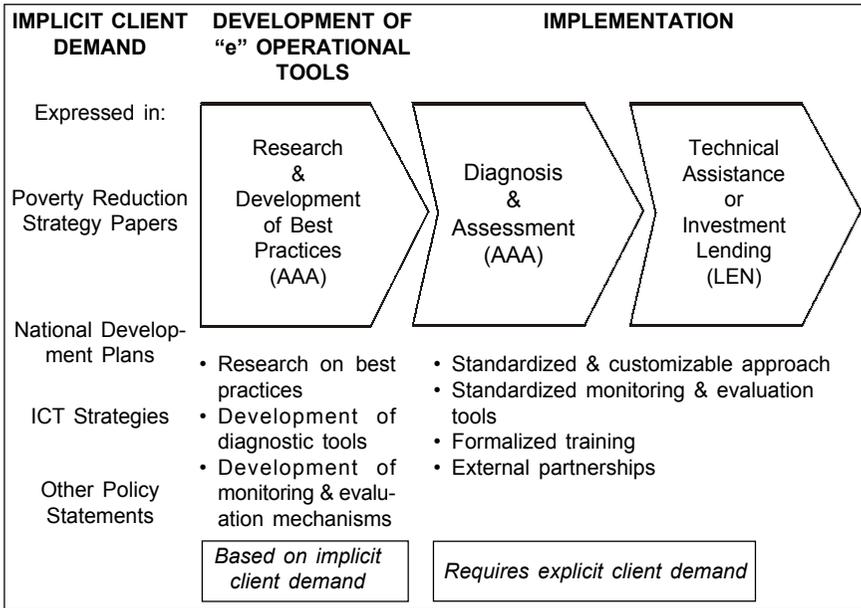


Figure 4: From client demand to implementation

Framework: e-government and ICT sector development. These tools will include a standard diagnostic component that will support a more formal assessment of clients’ needs and allow better benchmarking among the countries in the region. Developing these frameworks should enable the South Asia Region to respond to client demand in a more formalized way, share knowledge of best practices with operational staff, improve interventions in ICT-related projects, and provide insight into the best ways to structure operations that can successfully address clients’ ICT needs.

This strategy offers several benefits:

- **Research and development of best practices.** Reviewing existing interventions and developing more formalized operational tools will enable the South Asia Region to take a proactive role in developing best practices—rather than reacting to client demand without appropriate background knowledge.
- **Better internal capacity assessment and skills building.** More formalized best practice frameworks will enable World Bank project teams and sector units to better assess the internal resource requirements for implementing such frameworks in implementing ICT related projects. They will also allow more focused training, improving the quality of the services provided.

- **Better program development.** The integration of best practices into the Region's work offers clear benefits for program development.
- **Better monitoring and evaluation.** Among the main criticisms of ICT-related projects has been the lack of adequate mechanisms for monitoring and evaluation. The development of formalized tools will enable the Region to create more effective monitoring and evaluation mechanisms and use benchmarking techniques to compare the performance of similar projects.
- **Lower project preparation costs and better quality.** Formalized operational tools, by helping to streamline project development, could reduce the time required to prepare ICT-related projects. Moreover, since the tools would allow most of the assessment to be done up front, based on best practices, they should also help improve the quality and effectiveness of each project.
- **Implementation of the World Bank Group's ICT strategy.** The strategy provides for the implementation of the World Bank Group's ICT strategy, which assigns each World Bank Region the responsibility for developing and implementing its own strategic plan (see annex 3).

Initial Pilot Programs

The pilot programs envisioned as part of the top-down approach are in the two areas involving the greatest client demand and thus warranting the development of more formalized approaches: e-government and ICT sector development.

Operational tool for e-government. Although the South Asia Region has been delivering projects involving e-government to varying degrees, these projects do not take a comprehensive, integrated approach to addressing e-government concerns. It is therefore desirable that the Region, with the Finance and Private Sector Development Sector Unit (SASFP) as lead unit, develop a comprehensive, integrated operational tool for e-government. This tool will provide client countries with a more comprehensive view of e-government concerns. It could also encourage the development of a common World Bank framework for delivering e-government services, to ensure a consistent and comprehensive approach to e-government projects.

Given the potential size and complexity of e-government programs, it is envisioned that the operational tool will include components covering the different roles of government and allow flexibility and customization to meet clients' needs. SASFP will work with other Bank units, turning to the Information Solutions Group (ISG) for technical support on ICT applications and to the South Asia Region's Poverty Reduction and Economic Management Sector Unit, Financial Management Unit, and Procurement Services Unit for technical assistance in their areas.

Operational tool for ICT sector development. Working in close coordination with the Private Sector Development Network and the International Finance Corporation (IFC), SASFP will develop an operational tool for ICT sector development that will help answer critical questions that client countries are asking, particularly about developing software and ICT services. It is envisioned that the program will include a standard diagnostic component for assessing the basic labor, capital, infrastructure, and legal and regulatory issues involved in developing an ICT industry. Based on the assessment, the program would provide recommendations to the client as well as possibly technical assistance or investment lending to support the recommendations.

Other Programs for Consideration

Depending on the success of the first two programs and as part of the refinement of the eSAR strategy, the Regional management team may want to consider programs in several other areas of the ICT Development Framework: information technology (IT) literacy, sector-specific applications, and Knowledge Economy development.

Operational tool for IT literacy. An operational tool for IT literacy would be aimed at improving IT literacy at all levels of education—from primary through tertiary as well as adult education. Such a program should not be confused with the use of technology in education (IT for education), such as distance education and open learning, which would be part of sector-specific programs. Instead, the program would involve improving IT literacy and skills throughout society (IT education) through the inclusion of IT literacy in school curricula; the rollout of ICT in schools, colleges, and adult education; public-private partnerships to develop technical skills training programs; and advice and skills training for entrepreneurs and government officials. (This approach is based on pillar 3 of the World Bank Group's ICT strategy; see annex 3.)

Frameworks for sector-specific applications. Each sector unit would develop a sector-specific ICT strategy with appropriate frameworks and guidelines for incorporating ICT into the Regional work programs. To develop consistent and coherent work programs across the World Bank Regions, the South Asia Region sector units would need to partner with their corresponding network units. This approach would eliminate potential redundancies and ensure the use of ICT work to address sector priorities identified by the network units. The South Asia Region sector units would also be responsible for developing learning programs for staff based on the frameworks, to equip task managers to incorporate ICT applications into their project work.

Any of the sector-specific strategies could potentially become a stand-alone program. But given economic considerations of the SAR countries, and the

capacity and priorities of the sector units, these frameworks do not warrant development into stand-alone assessment tools like those for e-government and ICT sector development. In the future there may be an opportunity to develop stand-alone sector-specific operational tools such as e-health or e-rural development, but these would have to depend on clients' needs and technological developments in the sector.

Knowledge economy development program. The World Bank Institute has expertise in developing a knowledge economy development program that would assist the South Asia Region's client countries in identifying ways to use ICT in lifelong learning and innovation. This program would consist primarily of an assessment of research and development capabilities in a country. It would also include assistance in strengthening a country's capacity to access knowledge as a basis for enhancing competitiveness and increasing welfare.

Ongoing GICT Programs

The World Bank's Global Information and Communication Technologies Department (GICT) is already developing and managing work programs for Regions across the Bank in two key areas of the ICT Development Framework: information and communication infrastructure and ICT legal and regulatory framework. As part of this, it will develop programs in these areas for the South Asia Region.

Operational tool for information and communication infrastructure. GICT will ultimately be responsible for developing a comprehensive work program addressing the need for deploying information and communication infrastructure throughout the countries of South Asia. As part of this effort, it will develop a comprehensive operational tool covering the following areas:

- Promoting private sector leadership in extending the reach of ICT through the development of information infrastructure.
- Supporting the development of soft infrastructure such as software development, enabling technologies, and delivery and payment systems.
- Providing technical assistance to extend access beyond what commercial providers are prepared to do.
- Encouraging the development of specialized funds to provide one-time capital subsidies to promote access and local participation in nonprofit communication and information facilities.

This approach recognizes the importance of an adequate enabling environment for ICT for development that ensures equitable access to

information and communication infrastructure. (The approach is based on pillar 2 of the World Bank Group's ICT strategy; see annex 3.)

Operational tool for ICT legal and regulatory framework. GICT will ultimately be responsible for developing a comprehensive work program addressing issues relating to the legal and regulatory framework for ICT. GICT will develop an operational tool for the legal and regulatory framework that covers the following areas:

- Integrated policy framework to deal with all elements of physical infrastructure.
- Legislative and regulatory reforms required to facilitate the commercial and social exploitation of the Internet through e-commerce and e-government applications.
- Greater attention to the use of the postal sector for the delivery of ICT services and broadcast media in development.
- Regulatory development and capacity building to be extended beyond initial reforms to ensure sustainability. (This approach is based on pillar 1 of the World Bank Group's ICT strategy; see annex 3.)

Responsibilities within the Region

To ensure a coordinated approach with clear roles and responsibilities for each participating unit, the eSAR strategy has defined three roles for units in the South Asia Region: lead, supporting, and coordinating.

Lead unit. A lead unit will be assigned to each program, with ultimate responsibility for all aspects from development to implementation of the operational tool. The lead unit will typically be responsible for client interaction and program delivery as well as overseeing aspects of the development of the operational tool. The lead unit will also be responsible for integrating the ICT program into the Country Assistance Strategy.

Each lead unit will be responsible for developing a program document for each component that will clearly communicate to both internal and external stakeholders its scope and magnitude. These program documents will help the lead units identify the human resources required to implement the operational tools, the type of training needed, the scope of the South Asia Region's involvement in each issue, and the partnerships with external service providers for the delivery of the programs.

The lead units should be encouraged to create program development teams with participation from the sector networks and from support units such as ISG and GICT. In addition to developing formalized operational tools, the program development teams will be responsible for identifying potential

partnerships with external stakeholders and developing learning programs for operational staff.

Support unit. The support units will work in close coordination with the lead unit in developing and implementing programs, providing the technical or specialized skills to deliver different program components.

Coordinating unit. SASFP will act as the coordinating unit for all eight programs to ensure consistency and quality in all the operational tools. In this capacity it will also be responsible for integrating all the component strategies into one comprehensive strategy that can be offered to clients in South Asia. After the program development phase is completed, SASFP will lead a task force of representatives from each of the sector units that will have ongoing responsibility for overall coordination of these efforts.

Support Roles

The cross-cutting nature of ICT issues has made it difficult to establish clear boundaries around the roles and responsibilities of the units working on ICT initiatives. Indeed, overlap between units is expected on some issues, primarily those relating to the enabling environment, such as labor, infrastructure, and legal and regulatory issues. Any program that takes a comprehensive approach to ICT applications will involve many of these issues to varying degrees. In an ICT sector development program, for example, labor, infrastructure, and legal and regulatory issues will all come into play. Still, there should be some definition of the roles and responsibilities of the specialist units in this area—GICT and ISG—to ensure effective and efficient implementation of the eSAR strategy. Defining the roles and responsibilities of these units would also inform internal stakeholders within the Region about the services each can provide to the task teams implementing the strategy.

To ensure that roles and responsibilities relating to the eSAR strategy are clearly defined, the South Asia Region should request that GICT and ISG jointly develop a formalized cross-support program outlining each unit's responsibilities relating to the ICT programs and sector applications.

Global Information and Communication Technologies Department. GICT has been known as the “Telecom People,” emphasizing its traditional core competencies in telecommunications reform and policy issues. Its role has evolved over the years, however, and now includes all policy issues relating to information and communication infrastructure. The department's Policy Division (CITPO) has developed a strong background in infrastructure and policy-related issues. Since CITPO staff are task managers for their own projects, they also have a good understanding of the operational aspects of

developing and implementing ICT-related projects. Thus in addition to GICT's responsibilities in the eSAR strategy for developing the information and communication infrastructure and ICT legal and regulatory programs, **CITPO will provide cross-support to the Region and the program development teams in areas relating to ICT policy and infrastructure issues.**

Information Solutions Group. ISG has been known as the "IT Guys," highlighting its traditional core competency in system design and its work to support management and operational functions within the World Bank. Its role has now been expanded through the creation of the ISG Informatics Advisory Services (ISGIA). ISGIA assists project teams in developing program specifications for the procurement of technologies for the ICT components of World Bank projects. Given the growth in such ICT components, the demand for this service has increased in the past few years.

While ISG traditionally has not been involved in task management for stand-alone projects and thus may lack a strong background in project development, it does have a good understanding of the sector applications of ICT. Under the eSAR strategy ISG will therefore focus on its core competency: **ISG will provide technical assistance to the program development teams in identifying new and innovative technologies that can be applied in the ICT programs.** In addition, ISG will continue to assist project teams in developing IT program specifications.

Is there Sufficient Client Demand?

Do clients express sufficient demand for the elements of the programs proposed as part of the eSAR strategy? A review of country policy statements (in PRSPs, national development plans, national ICT strategies, and the like) reveals a large number of specific references to these elements (table 1). Although the references tend to be general, they do indicate an overall interest in such programs at a regional level.

Some of the client demand for ICT-related programs is already being met by World Bank projects in the region. But the approach has lacked the comprehensiveness needed to achieve the most effective results.

Table 1: Do clients express demand for the tools in the eSAR strategy?
(documents in which programs are mentioned)

	<i>Afghanistan</i>	<i>Bangladesh</i>	<i>Bhutan</i>	<i>India</i>	<i>Maldives</i>	<i>Nepal</i>	<i>Pakistan</i>	<i>Sri Lanka</i>
IT literacy and skilled labor	Yes Draft ICT Policy	Yes National Strategy, ICT Policy	Yes ICT Master Plan	Yes 10th Plan	Yes 6th NDP	Yes ICT Policy	Yes IT Policy, I-PRSP 2000	Yes Telecom Policy
Information and communication infrastructure	Yes SAF, draft ICT Policy	Yes ICT Policy	Yes ICT Master Plan	Yes New Telecom Policy, 10th Plan	Yes Telecom Policy	Yes 10th Plan, ICT Policy, Telecom Policy	Yes IT Policy, I-PRSP 2000	Yes Telecom Policy
Legal and regulatory framework	Yes SAF, draft ICT Policy, Telecom & Internet Policy	Yes ICT Policy	Yes ICT Master Plan	Yes New Telecom Policy	Yes 6th NDP, Telecom Policy	Yes 10th Plan, ICT Policy, Telecom Policy	Yes IT Policy, I-PRSP 2000	Yes Telecom Policy
E-government	Yes Draft ICT Policy	Yes National Strategy, ICT Policy	Yes ICT Master Plan	Yes 10th Plan	Yes 6th NDP	Yes ICT Policy, Telecom Policy	Yes IT Policy, I-PRSP 2000	Yes Telecom Policy
ICT sector development	Not mentioned	Yes National Strategy, ICT Policy	Yes ICT Master Plan	Yes New Telecom Policy, 10th Plan	Yes 6th NDP	Yes 10th Plan, ICT Policy, Telecom Policy	Yes IT Policy, I-PRSP 2000	Yes Telecom Policy
Sector-specific applications	Yes Draft ICT Policy, Telecom & Internet Policy	Yes National Strategy, ICT Policy	Not mentioned	Yes 10th Plan	Yes 6th NDP, Telecom Policy	Yes 10th Plan, ICT Policy, Telecom Policy	Yes IT Policy	Yes Telecom Policy
Knowledge economy development	Yes ICT Policy for Afghanistan: Final Report	Yes ICT Policy	Not mentioned	Yes World Bank involvement	Yes 6th NDP	Yes Telecom Policy	Not mentioned	Not mentioned

Note: For precise references in the country policy documents, see annex 1. For definitions of the acronyms and abbreviations in the table, see the list at the front of the document.

Implementation Plan

Implementation of the eSAR strategy should occur in two phases, to reduce the risks associated with the development of such a new and innovative strategy and to spread the up-front costs over a longer period.

How to Implement the Strategy? Two Phases

Phase 1 consists of a learning-by-doing review of the South Asia Region's existing work program relating to ICT applications and the test development of two priority programs identified by the strategy team. A thorough review is recommended after the development and piloting of the phase 1 programs and before the phase 2 programs are developed.

Phase 1

Learning-by-doing review. Working closely with the Regional sector units, SASFP will review the Region's existing portfolio of projects involving ICT applications and, based on this review, identify and develop best practices. This work will produce a series of best practice notes and operational toolkits that can be shared with operational staff working on ICT-related projects. The notes will provide practical insight, based on experience, into how to develop and manage such projects.

Experimental top-down projects. Programs will be developed for e-government and ICT sector development, identified as the key priorities through the extensive review and analysis of ICT policy statements issued by the Region's client countries. This work will primarily involve research and development of best practice frameworks for each program, along with the development of standard diagnostic and operational tools that can be used by project teams. The proposed budgets in table 2 are for the program development phase; actual piloting and implementation of the programs

Table 2: Proposed timelines for program development in phase 1

<i>Program</i>	<i>Timeline</i>
Learning-by-doing review	1 year
Operational tool for e-government	1 year, 3 months
Operational tool for ICT sector development	1 year
Total	

will be based on explicit client demand after the programs have been formalized.

Phase 2

A critical part of phase 2 will be a review of the phase 1 projects and approach, and the development of the refinement of the strategy to ensure adequate responsiveness to client demand and consistency with overall economic development objectives in South Asia.

Depending on the success of the pilot programs in phase 1, the South Asia Regional management team may consider the development of follow-on programs that are consistent with the ICT Development Framework. Programs are proposed in two areas: IT literacy and knowledge economy development (table 3). In addition, the management team may consider allocating budgets to each of the sector units for developing sector-specific best practice frameworks that can help guide each sector in better incorporating the use of ICT into its work program.

Table 3: Proposed timelines for phase 2

<i>Program</i>	<i>Timeline</i>
Review of phase 1 projects and approach	3 months
Operational tool for IT literacy and skilled lab	1 year
Sector-specific frameworks (for 5 sectors)	1 year
Knowledge economy development program	1 year

GICT-funded Operational Tools

The South Asia Region may also consider requesting GICT to develop formalized operational tools based on the first two pillars of the World Bank Group’s ICT strategy, to achieve consistency with the ICT Development Framework and encourage the full implementation of the strategy in South Asia. These operational tools, for information and communication infrastructure and the ICT legal and regulatory framework, would cover the

Table 4: Proposed timelines and budgets for GICT-funded tools

<i>Program</i>	<i>Timeline</i>	<i>Budget</i>
Operational tool for information and communication infrastructure	1 year	n.a.
Operational tool for ICT legal and regulatory framework	1 year	n.a.

n.a. Not applicable.

last two pillars of the enabling environment in the ICT Development Framework. Because of GICT's status as a global product group, the funding for the development of these programs should come from its budget (table 4).

Program Development Phases

Development of each proposed program will require the following phases:

- **Proposal and identification.** Each program development unit will have a two-month period in which to identify the resources and scope of the work needed to develop the program. During this period the program development team will identify the resources required for the job, hire qualified consultants (if necessary), nominate three peer reviewers for the program, and submit a proposal to management for the program development phase. At the end of this phase the proposal will be reviewed by management and the peer reviewers assigned to the program.
- **Program preparation.** This phase will primarily involve research and data collection, identification of potential partners (external and internal), development of the diagnostic tools, identification of lending programs that could potentially be associated with the program, and development of the “marketing” material for use in promoting the program to external stakeholders. The program development unit will also consider the training needed to implement the program.
- **Program appraisal.** This phase will involve the peer review of the program developed, and modifications for consistency, quality, and scope. A member of the SASFP ICT coordinating team will be assigned to the appraisal phase for each program to ensure consistency with the other programs.
- **Program launch and dissemination.** This phase will involve promoting the program to internal and external stakeholders through presentations, conferences, and forums.

Possibilities for Cross-Regional Partnering

Many of the issues covered by the eSAR strategy are ones that Regional units across the World Bank are also considering, although none has yet developed a formalized approach to these issues. Developing the proposed programs in the eSAR strategy would thus enable the South Asia Region to establish intellectual leadership in this area and could create opportunities to partner with other Regions interested in developing similar approaches. Such partnering across Regions has clear benefits, allowing the easy sharing of

information and learning and thus potentially enhancing the quality of the programs being developed.

The drafting team has been in discussion with the East Asia and Pacific Region about a potential partnership in developing a coordinated learning program that would meet the needs of both Regions.

ANNEX 1

Country ICT Policy Statements

Afghanistan: ICT Policy Statements

IT literacy and skilled labor	<p>Recognizing the importance of building a skilled workforce capable of understanding, entering, and benefiting from the digital age, the Government, through the Ministry of Communication, the Ministry of Education, and Ministry of Higher Education and associated institutions, will support efforts to establish effective ICT training courses at secondary and tertiary levels. Moreover, the Government will build partnerships with the private sector to implement corporate training facilities as needed. (Draft ICT Policy, p. 4)</p>
Information and communication infrastructure	<p>Part of the Ministry of Communication’s five-year countrywide investment program—Telecommunications infrastructure including (potentially) (i) a fiber-optic ring following the route of the major ring road building project, as well as microwave spurs to link towns and cities not on the major road route; (ii) a district communications initiative to bring connectivity to district capitals; (iii) an expansion of the Afghan Tel’s fixed wireless network; and (iv) other items including billing systems, spectrum management, and the rollout of telekiosks and related ICT initiatives. (<i>Securing Afghanistan’s Future</i>, telecom annex, p. 1)</p> <p>Recognizing the importance of the development of infrastructure including rural areas within the national territory, the Government will provide, through a competitive market environment, universal access to information and communication facilities including the Internet to rural areas of Afghanistan. By the year 2008, 50% of the population of Afghanistan will have full access to communication facilities, and by the year 2010,</p>

	<p>99% of the population will be covered. (Draft ICT Policy, p. 3)</p>
<p>Legal and regulatory framework</p>	<p>Part of the Ministry of Communication’s five-year countrywide investment program—Restructuring: support to the regulatory and legal frameworks and the corporatization of both the postal and telecommunications operator. (<i>Securing Afghanistan’s Future</i>, telecom annex, p. 1)</p> <p>In order to foster the creation of an environment which will allow in the near future the capacity to trade goods and services by electronic means (e-commerce), the Government will draft appropriate legislation and will establish the necessary mechanisms to create and regulate the sector while protecting the rights of consumers and the interests of operators. (Draft ICT Policy, p. 3)</p> <p><i>Create a legal and regulatory environment that nurtures and accelerates industry growth.</i> The Government intends to rapidly introduce a <i>Telecommunications Law of 1382</i> that will define the rights and responsibilities of market participants in the telecommunications sector.⁴ It will also create an independent telecommunications regulator, the <i>Telecommunications Regulatory Authority of Afghanistan (TRAA)</i>, to implement the Government’s commitment to international best practices for sector modernization and reform.</p> <p><i>Establish a level playing field for competition.</i> The role of the state in providing telecommunications services will be steadfastly reduced in favor of fair, transparent, and market-based competition among commercial enterprises.</p> <p><i>Introduce market liberalization.</i> Afghan consumers will benefit from healthy competition in all aspects of telecommunications networks and services. Market opening will lead to a wider range of suppliers and products, lower costs, and establish a service industry that is responsive to customer demands. New entrants will bid competitively for market opportunities based on open and transparent international tenders. In the near term the Government will introduce a framework of</p>

⁴ The Islamic calendar year of 1382 began on March 21, 2003.

	<p>limited, managed competition to ensure stable market conditions for strategic infrastructure projects. Aggressive liberalization of the sector is anticipated after three years, or commencing in 2006. (Telecom & Internet Policy, p. 4)</p>
E-government	<p>Recognizing the importance of government efficiency, the Government will assist in the computerization of all central governmental entities by the year —. The Government will support efforts to enhance its effectiveness by using e-government technology and by establishing one or more national data centers. Recognizing the importance of ICT as a vital tool for improving social services, the Government will actively support the use of ICT to promote education, health, employment, industrial development, infrastructure building, citizen services such as identity cards, cadastral information, certificates, etc., by the year —. The Government will give particular attention to services to benefit underprivileged groups and the poor. (Draft ICT Policy, p. 4)</p>
ICT sector development	<p>General and implicit mention of private sector participation and investment.</p>
Sector-specific applications	<p>Recognizing the importance of government efficiency, the Government will assist in the computerization of all central governmental entities by the year —. The Government will support efforts to enhance its effectiveness by using e-government technology and by establishing one or more national data centers. Recognizing the importance of ICT as a vital tool for improving social services, the Government will actively support the use of ICT to promote education, health, employment, industrial development, infrastructure building, citizen services such as identity cards, cadastral information, certificates, etc., by the year —. The Government will give particular attention to services to benefit underprivileged groups and the poor. (Draft ICT Policy, p. 4)</p> <p><i>Encourage the usage of Internet and information and communication technologies (ICT). Widespread adoption of modern information technology tools will create new educational opportunities for the young, improve the</i></p>

	<p>efficiency of government departments and private companies, and help Afghanistan to “leap frog” into the digital age. Recent technological advances have unleashed a range of new alternatives for bringing powerful and affordable voice and data services to consumers. The Government is committed to pursuing an open, flexible, and technology-friendly regulatory strategy to encourage the deployment of the latest technologies throughout Afghanistan. (Telecom & Internet Policy, p. 4)</p>
<p>Knowledge economy development</p>	<p><i>Lifelong learning as a key element in ICT policy.</i> The opportunity to learn is essential for the Afghan people to manage the transition to a knowledge-based society successfully. Accordingly, there is a need to develop learning opportunities for the new environment. Efforts should include the development of distance and e-learning programs that reach out to women and schoolchildren, for upgrading work-related skills, and the stimulation of free and open-source software development. It will be important to involve key users such as NGOs, cooperatives, and community groups in using ICT in learning. (<i>Information and Communications Technology Policy for Afghanistan: Final Report</i>, ICT Policy Development and Implementation Seminar for Afghanistan, Kuala Lumpur, Malaysia, October 14–18, 2002, p. 9)</p>

Bangladesh: ICT Policy Statements

IT literacy and skilled labor	<p>Develop ICT literacy through the education system and ICT training facilities and provide affordable access to computers and the Internet, to harness the scope of employment creation through ICT, particularly for young women and men. (Strategy Paper, p. 42)</p> <p>Develop a large pool of world-class ICT professionals to meet the needs of local and global markets. (ICT Policy, section 2.2.8)</p>
Information and communication infrastructure	<p>Develop an efficient ICT infrastructure that provides open access to international and national networks. (ICT Policy, section 2.2.3)</p>
Legal and regulatory framework	<p>Establish a legislative and regulatory framework for ICT issues like intellectual property rights, data security and protection, digital signature, e-commerce, ICT education, etc., as well as to ensure quality ICT education provided by different private organizations. (ICT Policy, section 2.2.5)</p> <p>Enact laws and regulations for uninterrupted growth of ICT, in conformity with World Trade Organization (WTO) stipulations. (ICT Policy, section 2.2.10)</p>
E-government	<p>Use ICT to improve the quality and efficiency of public service delivery systems by strengthening internal information flows, increasing accountability and transparency, and enhancing efficiency of procurement systems. (Strategy Paper, p. 42)</p> <p>Promote use of ICT by providing special allocations for ICT project implementation in the public sector. Train the decisionmakers in ICT use and promote an ICT culture. (ICT Policy, section 2.2.7)</p>
ICT sector development	<p>Provide credit and support services for exploiting opportunities for paid and self-employment and entrepreneurial activities offered by international and domestic-oriented ICT industries and deployment of ICT across different industry groups. (Strategy Paper, p. 42)</p> <p>Provide effective incentives for development of the ICT sector to both local and foreign entrepreneurs. (ICT Policy, section 2.2.2)</p>

	Set up an ICT organization at the highest level to continuously promote and foster the ICT industry. (ICT Policy, section 2.2.9)
Sector-specific applications	<p>Emphasize areas like electronic books and libraries, cyber cafés, cyber kiosks, call centers, telemedicine, electronic mail and Web site design, electronic journalism, online education, medical transcription, ICT applications in banking and health sectors, multimedia and Web technology, and telework for self-employment. (Strategy Paper, p. 43)</p> <p>Promote and facilitate use of ICT in all sectors of the economy for transparency, good governance, and efficiency improvement. (ICT Policy, section 2.2.4)</p>
Knowledge economy development	Set up national databases that are reliable and easily accessible to all the people of the country. (ICT Policy, section 2.2.6)

Bhutan: ICT Policy Statements

IT literacy and skilled labor	Employees, high school dropouts, and unemployed youth will be given IT training, and schools and training institutes will be given the responsibility to train IT specialists and provide computer literacy training to all students. (ICT Master Plan, section 5.3, p. 10)
Information and communication infrastructure	Infrastructure development will consist of improving national telecommunications infrastructure, specifically a data network, installing computer networks in all government agencies and <i>dzongkhag</i> [district] administrations, installing a governmentwide intranet, and consolidating the existing Internet service provider. (ICT Master Plan, section 5.1, p. 10)
Legal and regulatory framework	The government will enact an IT law and implement digital signatures. The government will also ensure that a regulatory body coordinates all IT activities. (ICT Master Plan, section 5.5, p. 10)
E-government	<i>Information management and content development.</i> The Royal Government will shift to electronic communication wherever possible, and will provide online information and e-services through a one-stop access point. (ICT Master Plan, section 5.4, p. 10)
ICT sector development	The government will encourage the establishment of IT companies, computerization of private businesses, export of IT services, and the development of e-commerce. (ICT Master Plan, section 5.7, p. 10)
Sector-specific applications	
Knowledge economy development	No mention

India: ICT Policy Statements

<p>IT literacy and skilled labor</p>	<p>To put in place the required policy framework to improve the quality of manpower, skills, and R&D in IT. (Tenth Five-Year Plan, chapter 7.4, section 7.4.19, p. 810)</p> <p>Postgraduate education and research in IT would be pursued as will R&D in the emerging areas of bluetooth technology, e-commerce, nanotechnology, and bioinformatics solutions. (Tenth Five-Year Plan, chapter 7.4, section 7.4.21, p. 811)</p>
<p>Information and communication infrastructure</p>	<p>Access to telecommunications is of utmost importance for achievement of the country's social and economic goals. Availability of affordable and effective communications for the citizens is at the core of the vision and goal of the telecom policy.</p> <ul style="list-style-type: none"> • Strive to provide a balance between the provision of universal service to all uncovered areas, including the rural areas, and the provision of high-level services capable of meeting the needs of the country's economy. • Encourage development of telecommunications facilities in remote, hilly, and tribal areas of the country. • Create a modern and efficient telecommunications infrastructure taking into account the convergence of IT, media, telecom, and consumer electronics and thereby propel India into becoming an IT superpower. (New Telecom Policy, section 1.3) <p>Foreign investment in the sector will be encouraged by further simplifying policies and strengthening and upgrading telecommunications and IT infrastructure. (Tenth Five-Year Plan, chapter 7.4, section 7.4.21, p. 811)</p>
<p>Legal and regulatory framework</p>	<p>Transform, in a time-bound manner, the telecommunications sector to a greater competitive environment in both urban and rural areas providing equal opportunities and a level playing field for all players. (New Telecom Policy, section 1.3)</p>

E-government	<p>To devise appropriate policy interventions for the greater use of IT for promoting more efficient, transparent, and responsive governance. (Tenth Five-Year Plan, chapter 7.4, section 7.4.19, p. 810)</p> <p>Priority will be given to e-governance, development of software in Indian languages, IT for masses, distance education, e-commerce, cyber security, and human resource development. (Tenth Five-Year Plan, chapter 7.4, section 7.4.21, p. 811)</p>
ICT sector	<ul style="list-style-type: none"> • To ensure the sustained growth of software and IT-enabled services and increase India's share in the global market. • To put in place the basic policy framework for making India a major force in the hardware manufacturing sector. • To promote the development and use of software in Indian languages to meet local requirements and expand the domestic market. <p>(Tenth Five-Year Plan, chapter 7.4, section 7.4.19, p. 809)</p> <p><i>Software development and exports and IT-enabled services.</i> New markets for software exports would be developed. (Tenth Five-Year Plan, chapter 7.4, section 7.4.21, p. 810)</p> <ul style="list-style-type: none"> • Strengthen research and development efforts in the country and provide an impetus to build world-class manufacturing capabilities. • Enable Indian telecom companies to become truly global players. <p>(New Telecom Policy, section 1.3)</p>
Sector-specific applications	<p>Priority will be given to e-governance, development of software in Indian languages, IT for masses, distance education, e-commerce, cyber security, and human resource development. (Tenth Five-Year Plan, chapter 7.4, section 7.4.21, p. 811)</p>
Knowledge economy development	<p>No mention</p>

Maldives: ICT Policy Statements

<p>IT literacy and skilled labor</p>	<p><i>Policy 8: Expand and promote information and communication technology in education.</i></p> <p>Strategies:</p> <ul style="list-style-type: none"> • Develop and implement a policy and plan to incorporate information technology in teaching and learning. • Reduce Internet charges for students irrespective of location. • Provide adequate computers and IT connectivity to all schools. • Ensure that those completing primary school are computer literate. <p>(Sixth National Development Plan, chapter 5, section 5.2)</p>
<p>Information and communication infrastructure</p>	<p><i>Expand telecommunications services and reduce the disparity in service provision between Male and the other islands.</i></p> <p>Despite reasonable developments in telecommunications services in the country, significant differences still exist in service provision between Male and the other islands. So far, provision of mobile telephone service has been targeted at Male and the tourist resorts, where most of the economic and commercial activities are concentrated. A majority of the population is deprived of Internet service due to the unavailability of residential telephone lines as well as public Internet access centers, such as cyber cafés, on most of the islands. Hence, priority will be given to expanding telecommunications services and reducing the existing disparity in service provision between Male and the other islands. (Telecom Policy, chapter 2, p. 7)</p>
<p>Legal and regulatory framework</p>	<p><i>Provide the necessary means and powers to the regulator through an appropriate legislative framework to strengthen the telecommunications sector.</i> The absence of an appropriate legislative framework is a serious impediment to regulation of the telecommunications sector. The regulator’s role should be to protect the rights of consumers and service providers, as well as to promote policy objectives for sector development while maintaining a fair and level playing field for all</p>

stakeholders. To make the role of the regulator more effective, a telecommunications act that gives the necessary legal powers to the regulator would have to be formulated and enacted. (Telecom Policy, chapter 3, p. 10)

Open the telecommunications sector and encourage competition. Introducing competition in telecommunications services will lead to lower telecommunications charges, expansion of services, improvement of quality, and introduction of new services. In the Maldives the absence of competition in the telecommunications sector has resulted in expensive and slow expansion of services. Therefore, it is important to open the sector for competition. (Telecom Policy, chapter 4, p. 12)

Policy 26: Enable the use of telephone and Internet services at costs comparable internationally.

Strategies:

- Regulate pricing of Internet services so that the services are available at a commercially viable cost to users.
- Facilitate private sector investment in the provision of ICT-related services, such as Internet services, by liberalizing the telecom sector.

(Sixth National Development Plan, chapter 3, section 3.4.3)

Policy 27: Liberalize the information technology sector and create a knowledge-based economy.

Strategies:

- Open Internet and Web-based services to competition.
- Promote e-commerce and other enhanced network-based services, particularly those that encourage economic growth.
- Formulate, enact, and enforce laws and regulations to facilitate a conducive environment for a knowledge-based economy.

(Sixth National Development Plan, chapter 3, section 3.4.3)

<p>E-government</p>	<p><i>Policy 24: Use ICT to increase the efficiency in the provision of government services to the public.</i></p> <p>Strategies:</p> <ul style="list-style-type: none"> • Establish a network among government offices and other institutions for the purpose of sharing and exchanging information online or in real time. • Encourage government offices to use ICT where possible to increase efficiency in the provision of their services. • Develop appropriate policies, institutional structures, security systems, and the required regulatory framework to guide the development of the ICT network. <p>(Sixth National Development Plan, chapter 3, section 3.4.3)</p>
<p>ICT sector development</p>	<p><i>Policy 26: Enable the use of telephone and Internet services at costs comparable internationally.</i></p> <p>Strategies:</p> <ul style="list-style-type: none"> • Regulate pricing of Internet services so that the services are available at a commercially viable cost to users. • Facilitate private sector investment in the provision of ICT-related services, such as Internet services, by liberalizing the telecom sector. <p>(Sixth National Development Plan, chapter 3, section 3.4.3)</p>
<p>Sector-specific applications</p>	<p><i>Facilitate the use of info-communication technology in all areas of development.</i> If the Maldives is to reap the benefits of the info-communication revolution, then it has to acquire the necessary skills in this field. The introduction of info-communication technology and its proper use would result in a society that would utilize the information and knowledge to enhance productivity and improve its socioeconomic status. (Telecom Policy, chapter 6, p. 15)</p> <p><i>Policy 25: Increase the dynamism of the commercial and business sector of the Maldives through ICT.</i></p>

Strategies:

- Promote the use of e-commerce to increase the efficiency of commercial activities.
- Raise awareness of the commercial aspects of ICT.
- Encourage and promote the establishment of ventures in the collection, processing, and sale of information using ICT in the areas of health, education, commerce, etc.
- Create an enabling environment for e-commerce to flourish.
- Establish a system to use ICT to provide information on natural resources, business opportunities, technical assistance, consumers, and suppliers.
- Use ICT to monitor and assess the performance of economic policies and strategies.
- Design schemes to encourage the establishment of small ICT businesses.

(Sixth National Development Plan, chapter 3, section 3.4.3)

Policy 27: Liberalize the information technology sector and create a knowledge-based economy.

Strategies:

- Open Internet and Web-based services to competition.
- Promote e-commerce and other enhanced network-based services, particularly those that encourage economic growth.
- Formulate, enact, and enforce laws and regulations to facilitate a conducive environment for a knowledge-based economy.

(Sixth National Development Plan, chapter 3, section 3.4.3)

Knowledge economy development

Policy 27: Liberalize the information technology sector and create a knowledge-based economy.

Strategies:

- Open Internet and Web-based services to competition.

- Promote e-commerce and other enhanced network-based services, particularly those that encourage economic growth.
- Formulate, enact, and enforce laws and regulations to facilitate a conducive environment for a knowledge-based economy.

(Sixth National Development Plan, chapter 3, section 3.4.3)

Nepal: ICT Policy Statements

IT literacy and skilled labor	<p>To render assistance to educational institutions and encourage domestic and foreign training as a necessity for fulfilling the requirement for qualified manpower in various fields pertaining to information technology. (ICT Policy 6)</p> <p>To include computer education in the curriculum from the school level and broaden its scope. (ICT Policy 14)</p>
Information and communication infrastructure	<p>Information and communication services would be extended to rural areas in a coordinated and competitive manner by adopting proper modern technology.</p> <p>Consistent with the long-term target of extending 150 telephone lines for every thousand people by the end of the Twelfth Plan, the telecommunications sector would be reformed and promoted by creating a competitive environment to extend 40 telephone lines for every thousand people by the end of the Tenth Plan.</p> <p>Telecommunications media would be developed and expanded in a competitive manner to create regional balance. The private sector would be strongly encouraged to be involved in the development and promotion of telecommunications in rural areas.</p> <p>The National Information Network Structure would be expanded with the active participation of the private sector to accelerate the socioeconomic development of the country by massively utilizing information technology. Internet centers would be established in the district headquarters with the participation of the private sector.</p> <p>Radio Nepal would be developed as a national broadcasting body and satellite and computer technologies would be adopted to expand its broadcasting service within as well as outside the nation. The service of Radio Nepal would be expanded to cover the maximum number of people by improving and renewing the existing broadcasting system and by enhancing infrastructure capacity.</p> <p>With an aim of expanding services of Nepal Television to every family throughout the country free of cost, more</p>

relay transmission stations would be established and Nepal Television would be developed as a National Transmission Institution. Consistent with the concept of the second channel, programs would be produced to promote Nepalese culture, arts, and lifestyle and to compete with the foreign satellite channels by producing programs according to the interests of people and demand for time.

Communication media like FM transmission, participatory videos, local television, cable television, wall magazines, community audio tower, and audiocassette magazines will be encouraged to increase the flow of information among the general public. Stress would be placed on establishing integrated information centers in the district headquarters to provide multimedia services such as television, radio, telephone, and Internet for the benefit of the general public.

(Tenth Plan, chapter 19, section 19.4 d)

To provide Internet facilities to all village development committees of the country in phases. (ICT Policy 5)

To develop physical and virtual information technology parks in various places with the private sector's participation for the development of information technology. (ICT Policy 9)

Universal access to the telecommunications service. The telecommunications service shall be extended in such a manner that there shall be universal access to the service. The telecommunications service shall be made available to consumers through the shared telephone. Emphasis shall be given to extending telephone as fixed, mobile, etc. The satellite system may also be used for extension of service. Other services pertaining to information and communication shall be made available through the community center. (Telecom Policy, 4.1)

Development of corporate service. Arrangements shall be made in such a manner that leased line, data, and similar corporate services shall be available to government bodies and the private business sector in urban areas through more than one service provider. (Telecom Policy, 4.3)

Legal and regulatory framework

Legal and procedural reforms would be initiated with an aim of promoting private sector investments.

In keeping with the goal of rapid development of wireless technology in the broadcasting sector, the Frequency Management Institution would be made capable of effective reform of the frequency management system.

The capacity of the Nepal Telecommunication Authority, which is a regulatory body in the telecommunications sector, would be enhanced.

With an aim of making the electronic media more competitive and reliable and promoting healthy entertainment, knowledge, and information along with coordinated and competitive development of the broadcasting sector, a Broadcasting Authority would be established. An environment would be created for the maximum possible expansion of services by the private sector.

(Tenth Plan, chapter 19, section 19.4 d)

To draft necessary laws providing legal sanction for use of information technology. (ICT Policy 16)

Liberalization of the telecommunications sector. The telecommunications sector is kept open to service providers. However, the number of service providers may be limited by virtue of the radio spectrum. While providing directory service, the service provider shall be required to cover all consumers using the service. (Telecom Policy, 4.4)

Open licensing regime to be applied. The open licensing regime shall be applied to provide opportunity to all service providers to enter the telecommunications sector. Transparent methods shall be applied in granting such licenses. Moreover, an environment for healthy competition shall be created. (Telecom Policy, 4.5)

Commercialization of the Nepal Telecommunication Corporation. In connection with the commercialization of the Nepal Telecommunication Corporation, the corporation shall be converted into a company and the ownership of His Majesty's Government shall be gradually

	<p>decreased. In order to meet the increasing competition, various reform programs shall be conducted to make the company competent. (Telecom Policy, 4.10)</p> <p><i>Institutional development for implementation of policy.</i> For successful implementation of the Telecommunication Policy, institutional capacity shall be gradually developed by increasing human and economic resources of the Ministry of Information and Communication and the Nepal Telecommunication Authority. In connection with the formulation and implementation of policy and law pertaining to information and communication technology, the roles and responsibilities of the Ministry of Information and Communication and the Ministry of Science and Technology shall be clearly defined to avoid duplication. (Telecom Policy, 4.11)</p>
<p>E-government</p>	<p>To computerize the records of each governmental office and build Web sites for the offices for the flow of information. (ICT Policy 7)</p> <p>To gradually use information technology in all types of governmental activities and provide legal sanction for its use in such activities. (ICT Policy 17)</p> <p><i>Persons who have engaged in development activities shall be caused to use information and communication technology fully.</i> In order to bring effectiveness to such development activities as rural development and construction of infrastructure, governmental and nongovernmental persons and entities shall be caused to fully use information and communication technology such as the Internet by developing necessary capacity up to the district and village level. (Telecom Policy, 4.9)</p>
<p>ICT sector development</p>	<p>Telecommunications media would be developed and expanded in a competitive manner to create regional balance. The private sector would be strongly encouraged to be involved in the development and promotion of telecommunications in rural areas.</p> <p>The National Information Network Structure would be expanded with the active participation of the private sector to accelerate the socioeconomic development of the country by massively utilizing information technology.</p>

Internet centers would be established in the district headquarters with the participation of the private sector.

With an aim of making the electronic media more competitive and reliable and promoting healthy entertainment, knowledge, and information along with coordinated and competitive development of the broadcasting sector, a Broadcasting Authority would be established. An environment would be created for the maximum possible expansion of services by the private sector.

(Tenth Plan, chapter 19, section 19.4 d)

To prioritize research and development of information technology. (ICT Policy 3)

To create a conducive environment for attracting investment in the private sector, keeping in view the private sector's role in the development of information technology. (ICT Policy 4)

To develop physical and virtual information technology parks in various places with the private sector's participation for the development of information technology. (ICT Policy 9)

To establish a National Information Technology Center. (ICT Policy 11)

To establish a national-level fund by mobilizing resources from His Majesty's Government, donor agencies, and the private sector to contribute to research and development and other activities pertaining to information technology. (ICT Policy 12)

To establish venture capital funds with the joint participation of the public and private sectors. (ICT Policy 13)

To establish Nepal in the global market through the use of information technology. (ICT Policy 15)

Private sector participation to be encouraged. The private sector's participation in the telecommunications sector shall be encouraged. Foreign investment shall be attracted. Arrangements shall be made to regularly inform the private sector about particular reforms in the

	<p>telecommunications sector and about the opportunity available in this sector. (Telecom Policy, 4.6)</p> <p><i>Economic efficiency of the telecommunications sector.</i> Emphasis shall be given to increasing the economic efficiency of the telecommunications sector by creating an environment that promotes healthy competition among telecommunications service providers. (Telecom Policy, 4.12)</p>
<p>Sector-specific applications</p>	<p>The National Information Network Structure would be expanded with the active participation of the private sector to accelerate the socioeconomic development of the country by massively utilizing information technology. Internet centers would be established in the district headquarters with the participation of the private sector. (Tenth Plan, chapter 19, section 19.4 d)</p> <p>To increase the use of computers in the private sector. (ICT Policy 8)</p> <p>To use information technology to promote e-commerce, e-education, and e-health, among others, and to transfer technology to rural areas. (ICT Policy 10)</p> <p>To establish Nepal in the global market through the use of information technology. (ICT Policy 15)</p> <p><i>Appropriate information and communication technology for users in rural areas.</i> Appropriate information and communication technology shall be made available to users in rural areas on the basis of their capacity and need. In this connection, information and communication technologies based on radio, television, and telephone that do not require special training and literacy shall be made available in collaboration with the private sector and others. Information and communication technology services shall be made available to rural users through small service providers. (Telecom Policy, 4.8)</p> <p><i>Persons who have engaged in development activities shall be caused to use information and communication technology fully.</i> In order to bring effectiveness to such development activities as rural development and construction of infrastructure, governmental and nongovernmental</p>

	persons and entities shall be caused to fully use information and communication technology such as the Internet by developing necessary capacity up to the district and village level. (Telecom Policy, 4.9)
Knowledge economy development	<i>To enter the information society.</i> Other prerequisites such as extension of telecommunications service and a cyber law shall be developed to allow Nepal to effectively enter the information society. (Telecom Policy, 4.7)

Pakistan: ICT Policy Statements

<p>IT literacy and skilled labor</p>	<p>Develop an extensive pool of trained IT manpower at all levels to meet local and export requirements. (IT Policy, Goals)</p> <p>In order to develop a pool of IT professionals, 18 projects have been launched to produce a large number of IT professionals, ranging from blue collar IT workers to academically skilled professional degree holders. In this respect, COMSATS Institute of Information Technology has already been established as a center of excellence, which will award master’s and bachelor’s degrees in computer science, with a focus on Java technology. Additionally, thousands of students in data entry operations and medical transcription are being trained, while training courses for Government officials have also been launched. (Interim PRSP, chapter 4, section 4.3.1.80, p. 31)</p> <p>Free Internet connections to public sector universities. (Interim PRSP, chapter 4, section 4.3.1.82, p. 31)</p> <p>Develop a strong pool of IT professionals through new IT-based universities. (Interim PRSP, annex IV, section G, p. 87)</p> <p>Ensure IT professionals’ competence through a national testing service. (Interim PRSP, annex IV, section G, p. 87)</p>
<p>Information and communication infrastructure</p>	<p>Establish an efficient and cost-effective infrastructure that provides equitable access to national and international networks and markets. (IT Policy, Goals)</p> <p>Set up national databases that are reliable, secure, up to date, and easily accessible. These would be open databases. (IT Policy, Goals)</p> <p>Reduction in PTCL (Pakistan Telecommunications Company Limited) bandwidth charges by around 98% since 1998. Within two years, bulk availability of bandwidth increased 20 times. (Interim PRSP, chapter 4, section 4.3.1.82, p. 31)</p>

<p>Legal and regulatory framework</p>	<p>Develop an enabling legislative and regulatory framework for IT-related issues. (IT Policy, Goals)</p> <p>An appropriate legal framework is also being developed to regulate the IT industry, protect intellectual property rights, and promote e-commerce in the country. (Interim PRSP, chapter 4, section 4.3.1.80, p. 31)</p> <p>For effective institutional support, Telecommunication and Information Technology have been made separate divisions and placed under the Ministry of Science and Technology. (Interim PRSP, chapter 4, section 4.3.1.82, p. 31)</p>
<p>E-government</p>	<p>Promote widespread use of IT applications in government organizations and departments for efficiency improvement and transparency in functioning and service provision, and to organize and facilitate access to public information. (IT Policy, Goals)</p> <p>An e-government project is also being launched to improve the efficiency of public services. The project will generate significant opportunities for local software development and create new export potential in the country. (Interim PRSP, chapter 4, section 4.3.1.80, p. 31)</p>
<p>ICT sector development</p>	<p>Make the Government a facilitator and an enabler to provide maximum opportunities to the private sector to lead the thrust in development of IT in Pakistan. (IT Policy, Goals)</p> <p>Develop an extensive pool of trained IT manpower at all levels to meet local and export requirements. (IT Policy, Goals)</p> <p>Provide business incentives for both local and foreign investors to ensure the development of Pakistan's IT sector (including the software, hardware, and service industries) and the use of its products. (IT Policy, Goals)</p> <p>Revitalize, emphasize, and support the country's dormant manufacturing and research and development (R&D) potential. (IT Policy, Goals)</p> <p>Encourage and promote the development of quality software that can capture export markets. (IT Policy, Goals)</p>

	<p>Encourage expatriate IT professionals to return to Pakistan and establish software houses, and invest their time and effort in the development of local industry and software exports. (IT Policy, Goals)</p> <p>An e-government project is also being launched to improve the efficiency of public services. The project will generate significant opportunities for local software development and create new export potential in the country. (Interim PRSP, chapter 4, section 4.3.1.80, p. 31)</p> <p>In order to encourage software exports, the State Bank of Pakistan has allowed software exporters to retain 35% of their export earnings in foreign currency accounts, and contracts are now being accepted as collateral for software exports. The Pakistan Software Exports Board has been revamped to meet the challenges of the new IT environment with the main focus on providing marketing support to local IT companies. Furthermore, the government is opening marketing offices in Singapore, London, and San Francisco to encourage software exports from Pakistan. (Interim PRSP, chapter 4, section 4.3.1.81, p. 31)</p> <p>After the successful launch of Islamabad Software Technology Park, similar projects are being initiated in Lahore and Karachi. (Interim PRSP, chapter 4, section 4.3.1.82, p. 31)</p>
Sector-specific applications	<p>Promote extensive use of IT applications in trade, industry, homes, agriculture, education, health, and other sectors with widespread use of the Internet. (IT Policy, Goals)</p> <p>Develop a tradition of electronic commerce for both national and international transactions. (IT Policy, Goals)</p>
Knowledge economy development	No mention

Sri Lanka: ICT Policy Statements

IT literacy and skilled labor	<p><i>Human resources, intellectual capital.</i> The role of individual citizens in establishing and promoting the information society is paramount. Sri Lanka's greatest resource for development is the innovation, creativity, diversity, and energy of its people. Policies must ensure that all citizens are given the maximum opportunity to contribute to and benefit from the ICT revolution. This includes support for IT education curricula at every level of schooling, access for employees to IT training, and broad opportunities for individuals to express their ideas and concerns in the social, political, and cultural realms, by means of information technology. There is a particular need to support development of skilled personnel in the communications sector, as a basis for continued sector growth; the Telecommunications Regulatory Commission's Human Resources Development Committee represents an important contribution to pursuing this objective. Also, public universities and other educational and training institutions must play a key role in developing a skilled workforce, and in pursuing national and regional cooperation in research and development in the communications field. (Telecom Policy, section 2, p. 6)</p>
Information and communication infrastructure	<p><i>Communications and information services.</i> These are services that permit the creation, processing, and transmission of information, including fixed and mobile telephone services, data communications services including Internet access, satellite telephone service, and cable television and broadcasting services, among others. These are the services on which all other ICT-related activities are dependent, and are therefore the main focus of this policy. Policies regarding these services must be closely coordinated with policies regarding the other aspects of information infrastructure, including the ICT Development Roadmap prepared under the aegis of the Ministry of Economic Reform, Science and Technology, the National Development Plan of the Department of National Planning, and other policies to be established by related branches of the Government. (Telecom Policy, section 2, p. 5)</p>

Information technology, software, and equipment. These are the physical facilities, equipment, computers and related hardware and software that are at the heart of the information infrastructure. This sector covers consumer products as well as equipment required by businesses and providers of communications and information services, and includes both imported and domestically manufactured equipment. Access to all types of IT equipment must be facilitated to the greatest extent possible, by minimizing regulatory barriers as well as import tariffs and other restrictions. To enable the establishment of an integrated communications network, common standards with regard to equipment and services would be specified by the Telecommunications Regulatory Commission. The Telecommunications Regulatory Commission would also continue to grant interconnect and interface approvals for various service providers. (Telecom Policy, section 2, p. 6)

Internet. The emergence of the Internet permits the unlimited sharing of information and communication throughout the world instantly and economically. All efforts will be made to expand access to the Internet, including multimedia information sites, electronic mail, and other communications means. Special attention will be paid to promoting development of Sri Lanka-based information content. This policy also emphasizes the creation of adequate transmission capacity for Internet access, and reasonable prices for Internet services and underlying data transmission services. (Telecom Policy, section 2, p. 6)

Broadcasting and multimedia. Traditional broadcast television and radio technologies are fast converging with the telecommunications field, by means of cable television systems, fiber-optic and other terrestrial telecommunications networks, and the Internet. Audio and video information is no longer distinct from voice or data communication, and the rationale for wholly separate treatment of these media is becoming obsolete. The Government will encourage rapid expansion of multimedia information and entertainment services, in particular the growth of cable television systems and other multimedia broadband networks that provide advanced, interactive services. Where possible, these

technologies should continue to be integrated with other communications networks and services, to promote rapid and cost-effective development. In addition, special emphasis will be placed on promoting the development of information content, in all media, that is Sri Lankan in origin and focus, to reinforce national and cultural interests and values. Policies regarding access to information, responsibilities of broadcasters, privacy, libel, and similar restrictions on information content, should be reviewed as to their relevance and application to these new technologies. (Telecom Policy, section 2, p. 6)

Giving priority to mechanisms of low-cost access to ICT including wireless services and creation of innovative modes of self-financing multimedia access such as rural telecenters. (Telecom Policy, section 1, p. 5)

Legal and regulatory framework

Information technology, software, and equipment. These are the physical facilities, equipment, computers and related hardware and software that are at the heart of the information infrastructure. This sector covers consumer products as well as equipment required by businesses and providers of communications and information services, and includes both imported and domestically manufactured equipment. Access to all types of IT equipment must be facilitated to the greatest extent possible, by minimizing regulatory barriers as well as import tariffs and other restrictions. To enable the establishment of an integrated communications network, common standards with regard to equipment and services would be specified by the Telecommunications Regulatory Commission. The Telecommunications Regulatory Commission would also continue to grant interconnect and interface approvals for various service providers. (Telecom Policy, section 2, p. 6)

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	<p>multimedia information and entertainment services, in particular the growth of cable television systems and other multimedia broadband networks that provide advanced, interactive services. Where possible, these technologies should continue to be integrated with other communications networks and services, to promote rapid and cost-effective development. In addition, special emphasis will be placed on promoting the development of information content, in all media, that is Sri Lankan in origin and focus, to reinforce national and cultural interests and values. Policies regarding access to information, responsibilities of broadcasters, privacy, libel, and similar restrictions on information content, should be reviewed as to their relevance and application to these new technologies. (Telecom Policy, section 2, p. 6)</p> <p>Creating the conditions for continued private investment in the communication sector by ensuring a stable and transparent policy and regulatory environment, consonant with Sri Lanka's international commitments. (Telecom Policy, section 1, p. 5)</p> <p>Ensuring the efficient management of bottleneck facilities, including the frequency spectrum, numbers, and rights of way. (Telecom Policy, section 1, p. 5)</p> <p>Developing and publishing a national spectrum management plan based on a process of public consultation. (Telecom Policy, section 1, p. 5)</p>
E-government	<p><i>Electronic government.</i> The Government can improve its public services and further promote the growth of ICT throughout the country by adopting widespread applications of these technologies within its own operations. Wherever possible, Government agencies and departments should emphasize ICT-based initiatives, particularly in the areas of public education as well as health care and public information services. (Telecom Policy, section 2, p. 7)</p>
ICT sector development	<p><i>Broadcasting and multimedia.</i> Traditional broadcast television and radio technologies are fast converging with the telecommunications field, by means of cable television systems, fiber-optic and other terrestrial telecommunications networks, and the Internet. Audio and video information is no longer distinct from voice or data</p>

communication, and the rationale for wholly separate treatment of these media is becoming obsolete. The Government will encourage rapid expansion of multimedia information and entertainment services, in particular the growth of cable television systems and other multimedia broadband networks that provide advanced, interactive services. Where possible, these technologies should continue to be integrated with other communications networks and services, to promote rapid and cost-effective development. In addition, special emphasis will be placed on promoting the development of information content, in all media, that is Sri Lankan in origin and focus, to reinforce national and cultural interests and values. Policies regarding access to information, responsibilities of broadcasters, privacy, libel, and similar restrictions on information content, should be reviewed as to their relevance and application to these new technologies. (Telecom Policy, section 2, p. 6)

Enable Sri Lankan communications service providers to become truly global players. (Telecom Policy, section 1, p. 4)

Creating the conditions for continued private investment in the communication sector by ensuring a stable and transparent policy and regulatory environment, consonant with Sri Lanka's international commitments. (Telecom Policy, section 1, p. 5)

Encouraging and supporting research and development in the industry, including participation by Sri Lankan universities and private sector operators in regional and global R&D consortia and projects. (Telecom Policy, section 1, p. 5)

Sector-specific applications

Electronic commerce. New means of conducting business utilizing information and communications technologies are transforming the global economy. Sri Lanka must continue to follow these trends and encourage national businesses, large and small, to take advantage of these technologies to expand markets and increase employment. In particular, the Government will encourage the development of small, medium, and micro enterprises (SMMEs) that engage in electronic commerce, in both the domestic and the export sectors. A primary focus of

implementation and regulatory functions under this policy will be to support e-commerce development wherever possible. In addition, the Ministry will help coordinate and participate in efforts by other government departments to establish common policies on the legal, technical, financial, and trade issues that arise in relation to electronic commerce. In this effort, the Telecommunications Regulatory Commission shall play a leading role in coordinating governmental and industry efforts. (Telecom Policy, section 2, p. 7)

Broadcasting and multimedia. Traditional broadcast television and radio technologies are fast converging with the telecommunications field, by means of cable television systems, fiber-optic and other terrestrial telecommunications networks, and the Internet. Audio and video information is no longer distinct from voice or data communication, and the rationale for wholly separate treatment of these media is becoming obsolete. The Government will encourage rapid expansion of multimedia information and entertainment services, in particular the growth of cable television systems and other multimedia broadband networks that provide advanced, interactive services. Where possible, these technologies should continue to be integrated with other communications networks and services, to promote rapid and cost-effective development. In addition, special emphasis will be placed on promoting the development of information content, in all media, that is Sri Lankan in origin and focus, to reinforce national and cultural interests and values. Policies regarding access to information, responsibilities of broadcasters, privacy, libel, and similar restrictions on information content, should be reviewed as to their relevance and application to these new technologies. (Telecom Policy, section 2, p. 6)

Creating the conditions for businesses located in Sri Lanka to engage in all forms of electronic commerce using state-of-the-art ICT, and thereby creating skilled and rewarding employment for Sri Lankans. (Telecom Policy, section 1, p. 4)

Knowledge economy development

No mention

ANNEX 2

References to ICT in Country Assistance Strategies and PRSPs

This annex shows, for each World Bank client country in South Asia, the results of a comparison of references to the use of ICT in the World Bank's Country Assistance Strategy (CAS) for that country with such references in the country's Poverty Reduction Strategy Paper (PRSP) or equivalent document.

The tables in the annex highlight development goals for which the PRSP mentions the use of ICT applications and the CAS does not. (See annex 3 in the background document for more detailed analysis.)

Afghanistan: References to Use of ICT in the Transitional Support Strategy and Securing Afghanistan’s Future

<i>Fundamental development challenges and priorities</i>	<i>Transitional Support Strategy</i>	<i>Securing Afghanistan’s Future</i>
Reforming governance and public administration		
<i>Budgeting and revenue management</i>	No	Yes
Operationalize international payments system		
Improve capacity for public administration		
Recentralize fiscal system		
Building national administrative capacity		
<i>Development of a national reconstruction strategy</i>		
Strengthen aid coordination, monitoring, and reporting		
Communicate vision and accomplishments to the Afghan public	No	Yes
Strengthen human rights, security, and rule of law	No	Yes
<i>Humanitarian assistance and human and social capital</i>		
Strengthen communities to improve their livelihood through community-driven development programs		
Shift from humanitarian relief to national reconstruction		
Address the refugee issues		
<i>Health</i>		
Strengthen provision of basic health services		
<i>Education</i>	No	Yes
Improve access to primary, secondary, and tertiary education		
<i>Physical reconstruction, natural resource management, and private sector development</i>		
Develop physical infrastructure		

<i>Fundamental development challenges and priorities</i>	<i>Transitional Support Strategy</i>	<i>Securing Afghanistan's Future</i>
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Providing employment opportunities

Create foundations for private sector–led strategy

Foster urban development

Develop capacity for water resource management

Develop microfinance industry

Implement new telecommunications policy	No	Yes
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Develop transport infrastructure and services	No	Yes
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Note: The Transitional Support Strategy is equivalent to the CAS, and *Securing Afghanistan's Future* to the PRSP.

Bangladesh: References to Use of ICT in the CAS and PRSP

<i>Fundamental development challenges and priorities</i>	<i>CAS</i>	<i>PRSP</i>
Empowering communities and vulnerable groups		
Strengthen local government institutions		
Improve inclusion of women and safeguard tribal livelihoods and culture		
Develop more effective social safety nets and disaster mitigation mechanisms	No	Yes
Educate vulnerable groups on disaster mitigation and environmental conservation techniques	Yes	No
Strengthening human development		
<i>Education</i>		
Improve quality of teaching, classroom practices, and teacher training	No	Yes
Improve monitoring and administration of education service providers	No	Yes
Reorient school curriculum to meet labor market needs		
Improve access to and enrollment rates in schools		
<i>Health</i>		
Strengthen capacity for health care delivery, revenue collection, and accountability	No	Yes
Improve quality of health care services, especially at district and <i>thana</i> levels		
Reduce malnutrition as a public health issue		
Intensify HIV/AIDS prevention		
Promoting economic growth, improving the macroeconomic framework, and reforming the public sector and governance		
Reform civil service to improve its quality and effectiveness	No	Yes
Improve effectiveness and equity in civil justice system		
Accelerate state-owned enterprise reform and increase private sector participation	No	Yes
Improve targeting and efficiency of public expenditures	No	Yes
Minimize opportunities for corruption		
Amplify the “voice of society”	No	Yes

<i>Fundamental development challenges and priorities</i>	CAS	PRSP
Strengthen donor coordination and management of aid		
Generate employment	No	Yes
Accelerate pro-poor economic growth	No	Yes
Ensure macroeconomic balances	No	Yes
Sectoral issues and priorities		
<i>Agriculture and rural development</i>		
Improve land records and administration systems	No	Yes
Strengthen local institutions in natural resource and disaster management		
Provide training to improve capacity of community-based organizations		
Improve management and decentralized delivery of water, transport, electricity, and sanitation services		
Improve nonfarm growth and rural development	No	Yes
Improve efficiency of agricultural input markets		
<i>Private sector development</i>		
Develop small and medium-size enterprise sector		
Reduce cost of doing business	Yes	No
Improve trade tax and customs administration		
<i>Financial sector</i>		
	No	Yes
<i>Power and energy</i>		
Address weak utilities, infrastructure bottlenecks, management, and questionable quality		
<i>Transport</i>		
Improve planning, management, and maintenance		
Support connectivity and access at regional level for transport and logistics systems		
Address inefficiencies in Chittagong port		
<i>Information and communication technology</i>		
Improve service quality	Yes	Yes
Develop comprehensive ICT and telecommunications plan	Yes	Yes
Improve access to service in rural areas	Yes	No
<i>Urban development</i>		
Improve capacity of local governments and strengthen institutional coordination		
Improve access to urban services		
Improve efficiency of land and housing markets		

Bhutan: References to Use of ICT in the CAS and Ninth Plan

Fundamental development challenges and priorities CAS 9th Plan

Promoting cultural development

Promote awareness of Bhutan's rich cultural heritage

Strengthening human development

Education

Improve quality and relevance of education

Achieve universal enrollment	No	Yes
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Improve access to education

Develop private schools

Health

Provide access to primary health care services for all (especially in remote areas)	No	Yes
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Improve quality of health care delivery and staffing	No	Yes
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Promote better quality in traditional medicine and mental health

Extend HIV/AIDS prevention efforts to vulnerable groups and border areas	No	Yes
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Consolidate and strengthen health infrastructure

Introduce innovative methods of financing health care

Achieving balanced and equitable development

Maintain the momentum of development

Promote diversification into knowledge content service industries

Generate productive employment

Create enabling environment for private sector development	Yes	Yes
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Stimulate private sector employment for educated labor force

Address Dutch disease syndrome

Promote trade diversification

Strengthen poverty monitoring, assessment, and program coordination	No	Yes
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Strengthening governance

Improve tax base

<i>Fundamental development challenges and priorities</i>	<i>CAS</i>	<i>9th Plan</i>
Reduce reliance on external assistance in the long term		
Explore new sources of revenue		
Further develop institutions, governance systems, human resources, and participatory processes	Yes	No
Address ethnic unrest and threats to social stability (especially from insurgents)		
Promoting environmentally sustainable development		
Protect and regenerate forests		
Make full inventory of biodiversity resource base		
Maintain biodiversity		
Sectoral issues and priorities		
<i>Transport</i>		
Develop physical infrastructure		
Improve public transport system (surface transport)		
Improve international air services	Yes	No
<i>Communications and information</i>		
Expand services to rural population	Yes	No
Prepare an active IT strategy	Yes	No
<i>Urbanization</i>		
Minimize negative effects of urbanization by responding quickly to changes		
Focus on rural development		
Further commercialize agriculture		
Establish regional growth centers		
Improve urban design and planning		
<i>Agriculture and rural development</i>		
Address seasonal hunger, food insecurity, and exclusion of groups in remote areas		
Develop an interconnected rural sector with good social and physical infrastructure	Yes	Yes
Promote use of technology (such as greenhouses) for production of high-value crops		
<i>Financial sector</i>		
Liberalize sector and introduce competition	Yes	No

India: References to Use of ICT in the CAS and Tenth Plan

<i>Fundamental development challenges and priorities</i>	<i>CAS 10th Plan</i>	
Improving government effectiveness		
Reduce primary deficit at the center and in states		
Increase tax collection for states		
Improve resource mobilization in urban local governments		
Improve financing of civil service reforms		
Modernize financial management and reduce opportunities for corruption		
<i>Governance and service delivery</i>	Yes	Yes
Improve accountability, efficiency, and transparency of government operations in key sectors		
Strengthen effectiveness of decentralization, especially in poor states		
Improve public sector capacity to deliver health, education, and social services to poor and rural areas	Yes	No
Investing in people and empowering communities		
<i>Educational attainment for all</i>		
Improve access to education for all, especially for girls, scheduled castes and tribes, and the disabled	No	Yes
Raise literacy rates and quality of education	No	Yes
Reduce teacher shortages and absenteeism		
<i>Health</i>		
Reduce infant mortality rate		
Reduce maternal mortality rate		
Reorient health facilities to ensure better service for the poor	Yes	Yes
Improve access to basic and emergency health services	No	Yes
Control infectious diseases by implementing adequate control and surveillance programs	No	Yes
Address HIV/AIDS and increase knowledge of prevention measures		
<i>Empowerment and rural livelihoods</i>		
Empower the poor to participate in shaping public programs	No	Yes

<i>Fundamental development challenges and priorities</i>	<i>CAS 10th Plan</i>
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Improve access to basic services and infrastructure

Sectoral issues and priorities

Agriculture and rural development

Improve access to water and electricity in rural areas

Improve access to information on technology and

innovation for small-scale farmers	No	Yes
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Improve certification and property rights on land	Yes	No
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Improve agricultural research	No	Yes
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Increase efficiency of irrigation, water delivery, and management systems	No	Yes
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Improve access to markets for rural production and farming centers

Improve farm and nonfarm employment opportunities

Improve access to finance in the rural sector

Urban development

Improve efficiency of land and factor markets to foster urban development

Improve urban public transport system	No	Yes
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Improve delivery of urban services	No	Yes
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Infrastructure development to foster industrial growth

Improve operational performance of state energy systems

Improve intersectoral allocation and management of national and state water resources

Improve quality of interstate highway network, railway services, and port system management

Continue to promote private investment in telecommunications linked to sector reforms	Yes	Yes
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Private sector development

Improve small and medium-size enterprise development and private sector development	No	Yes
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Improve efficiency of financial sector	No	Yes
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Maldives: References to Use of ICT in the CAS and Sixth National Development Plan

<i>Fundamental development challenges and priorities</i>	<i>CAS</i>	<i>Sixth Plan</i>
Protecting the fragile environment of the islands		
Improve institutional capacity for environmental monitoring		
Decentralize management of environmental resources		
Protect coral reefs and coasts (coastal zone management, sea level rise)		
Reform environmental infrastructure for public service delivery		
Improving the business environment	No	Yes
Deepen and strengthen financial sector		
Promote delivery of financial services to the poor (strengthen microfinance operations)		
Promote development of small and medium-size enterprises	No	Yes
Strengthen commercial legal and judicial system		
Reform state-owned enterprises		
Strengthening human development		
<i>Education</i>	No	Yes
Improve quality of and access to education (especially in atolls)	No	Yes
Enhance teacher training		
Strengthen postsecondary and technical institutes	No	Yes
Support foreign-based university training		
<i>Health</i>		
Increase access to public health care in atolls	No	Yes
Reduce transmission of diseases (especially HIV/AIDS)	No	Yes
Address malnutrition in atolls		
Improve training and pay for government health workers		
Provide better water and sanitation facilities		
Provide reproductive health services		

<i>Fundamental development challenges and priorities</i>	<i>CAS Sixth Plan</i>
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**Strengthening the macroeconomic framework,
public expenditure management, and governance**

Reduce regional disparities in access to social services and infrastructure

Develop community-driven development approaches to meet needs of atolls

Introduce domestic tax system and

Address public sector skill shortages	No	Yes
Decentralize administration	No	Yes
Strengthen public accounting system	Yes	Yes
Develop accessible database on public finances	Yes	Yes
Strengthen budgetary processes		
Develop public sector expenditure framework		

Sectoral issues and priorities

Eliminate monopolies by state-owned enterprises

Tourism

Fisheries resources and access rights management

<i>Land use and urban development</i>	No	Yes
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Address deficiencies in land tenure systems
(titles, transfers, legal framework, and the like)

Nepal: References to Use of ICT in the CAS and PRSP

<i>Fundamental development challenges and priorities</i>	<i>CAS</i>	<i>PRSP</i>
Promoting broad-based economic growth		
Improve pro-poor budget allocation (achieve outcome-focused budgeting and monitoring)		
Improve efficiency of public spending		
Increase foreign direct investment (in part through state-owned enterprise reforms)		
Enhance labor productivity and protection of labor rights		
Improve agricultural productivity and access to agricultural inputs and credit	Yes	No
Extend access to telecommunications services to all village development committees	Yes	Yes
Increase share of population with access to roads and electricity		
Pursue land reform and improve land management	No	Yes
Strengthening human development		
<i>Education</i>		
Improve quality of and access to education (especially at the primary school level)		
Support decentralization of school and university management		
Improve and expand teachers' training program		
Strengthen school monitoring and supervision system		
Meet national demand for workers with basic and mid-level technical skills		
<i>Health</i>		
Increase access to and delivery of public health care services among underserved populations		
Improve training, retention, and quality of health personnel (especially in rural areas)		
Increase supply of essential drugs		
Reduce transmission of diseases (especially HIV/AIDS)		
Improve coverage of sanitation services among rural populations		

<i>Fundamental development challenges and priorities</i>	CAS	PRSP
<i>Social inclusion and targeted programs</i>		
Reduce number of primary school-age children out of school		
Improve delivery of services to disadvantaged groups		
Improve diversity of civil service through greater inclusiveness of disadvantaged groups		
Implement effective mechanisms for poverty monitoring		
Mainstream gender in development activities		
Strengthening the macroeconomic framework, public expenditure management, and governance		
Pursue prudent expenditure management		
Improve domestic resource mobilization		
Maintain monetary stability (such as by widening instruments for open market operations)		
Strengthen financial system (including rural finance system)		
Decentralize fiscal and administrative functions and put good monitoring systems into place	Yes	Yes
Improve transparency and accountability in public sector (civil service, judiciary, and so on)	Yes	Yes
Improve operational efficiency of stock market		
Enhance role of private sector in economic activities	Yes	Yes
Deploy anticorruption programs		
Enhance national security and rehabilitation of victims of violence		
Sectoral issues and priorities		
<i>Agriculture and rural development</i>		
Develop local export market opportunities		
Increase rural access to roads, electricity, and water supply		
Increase rural access to telecommunications	Yes	Yes
Promote irrigation development		
<i>Food security</i>		
Improve supply and distribution of essential commodities		

<i>Fundamental development challenges and priorities</i>	<i>CAS</i>	<i>PRSP</i>
<i>Private sector development</i>		
Develop and manage road transport network in a cost-effective manner		
Increase contribution of trade to economy		
Improve efficiency of financial service delivery (especially to the poor)		
Expand electricity coverage in a reliable manner		
Improve access to information and communication technologies	Yes	Yes
Expand industrialization and strengthen small and medium-size enterprises	Yes	Yes
<i>Tourism</i>		
Expand tourism activities		

Pakistan: References to Use of ICT in the CAS and PRSP

<i>Fundamental development challenges and priorities</i>	CAS	PRSP
Promoting social inclusion and equity		
Improve access to education and health services for women and children		
Strengthening human development		
<i>Education</i>		
Improve access to, quality of, and equity in primary education (universal primary education)	No	Yes
Increase access to primary and secondary education for vulnerable groups (such as girls)	No	Yes
Support reform of higher education		
<i>Health</i>		
Reduce mortality and morbidity with a focus on women and children		
Reduce population growth rate		
Improve quality of private health care services		
Create mass public awareness of health matters		
Strengthening the investment climate		
Promote private investment in industry (in part through state-owned enterprise reform)	Yes	Yes
Promote trade liberalization and modernization of business regulations	Yes	Yes
Promote development of small and medium-size enterprises		
Mobilize additional investments in infrastructure (giving strategic priority to natural gas sector)	No	Yes
Improve access to justice	No	Yes
Strengthening the macroeconomic framework and government effectiveness		
Enhance fiscal consolidation, reform tax administration, and increase budgetary transparency	Yes	Yes
Address widespread corruption in public sector and reform civil service	No	Yes
Improve competitiveness of economy (through trade, monetary, and exchange rate policies)		

<i>Fundamental development challenges and priorities</i>	<i>CAS</i>	<i>PRSP</i>
Support devolution agenda to improve efficiency, particularly of public service delivery at district level	No	Yes
Sectoral issues and priorities		
<i>Agriculture and rural development</i>		
Strengthen rural infrastructure		
Improve agriculture productivity and land distribution		
Improve efficiency of institutions for managing irrigation and drainage		
Strengthen community and farmer organizations		
Improve water supply and sanitation services and increase access to microcredit		
<i>Infrastructure</i>		
Deepen engagement in power sector		
Reduce engagement in transport sector		
<i>Information technology sector</i>	Yes	Yes
<i>Financial sector development</i>	No	Yes

Sri Lanka: References to Use of ICT in the CAS and PRSP

<i>Fundamental development challenges and priorities</i>	<i>CAS</i>	<i>PRSP</i>
Strengthening poverty reduction and economic management		
Enhance fiscal consolidation	Yes	No
Maintain price stability and sustainable balance of payments		
Reform trade and investment policy		
Reform labor market	Yes	Yes
Improve soundness of financial system (and address money laundering, counterterrorism, and the like)		
Reform public enterprises (including state-owned enterprises)	Yes	Yes
Reform energy sector		
Reduce cost of doing business		
Promote private sector involvement in infrastructure development		
Reforming governance and empowering the poor		
Reform public services to strengthen accountability (such as by improving coordination among agencies and upgrading tax administration)	No	Yes
Improve quality of judicial services		
Strengthen capacity for poverty assessment, monitoring, and evaluation		
Foster decentralization		
Improve capacity for forestry, ecotourism, coastal preservation, and wildlife preservation		
Enhance legal rights of the poor		
Reduce gender discrimination and discrimination against disadvantaged or vulnerable groups	No	Yes
Promote efficient use of urban land		
Reducing conflict-related poverty		
Improve delivery of relief services		
Monitor adherence to cease-fire arrangements		
Resettle displaced persons		
Rehabilitate conflict-affected regions		
Promote ethnic reconciliation		

<i>Fundamental development challenges and priorities</i>	<i>CAS</i>	<i>PRSP</i>
Creating opportunities for pro-poor growth		
Connect poor regions to dynamic markets	No	Yes
Bridge information gap for the poor (close the digital divide), especially in rural areas, conflict areas, and IDPs	Yes	Yes
Revitalize rural development to reduce rural poverty		
Foster development of small and medium-size enterprises	No	Yes
Investing in people		
Assist ultrapoor communities through direct interventions		
Integrate poverty reduction into sector strategies		
Improve delivery of public services to the urban poor	No	Yes
Deliver education services linked to employment markets and needs of industry		
Improve quality of education (especially in conflict areas)	No	Yes
Modernize secondary schools		
Match vocational training to labor market demands	No	Yes
Improve access to and quality of tertiary education	No	Yes
Incorporate ethnic harmony into education		
Promote improvements in health		
Increase knowledge of health and nutrition among the poor	No	Yes
Expand access to health care services among the poor and in conflict areas		
Improve effectiveness of use of health care resources		
Restructure social protection system		
Improve urban habitats for the poor		
Sectoral issues and priorities		
<i>Agriculture and rural development</i>		
Improve sewerage, sanitation, irrigation, and water delivery systems in rural and conflict areas		
Foster development of microenterprises		

<i>Fundamental development challenges and priorities</i>	<i>CAS</i>	<i>PRSP</i>
Improve functioning of land markets	No	Yes
Raise productivity of farm and nonfarm sectors for rural development	No	Yes
Improve functioning of agricultural input, output, and technology markets	Yes	No
<i>Telecommunications</i>	No	Yes

Note: Although the current administration repudiated the previous national development policy (as set forth in the PRSP *Regaining Sri Lanka*) after the government changeover in Sri Lanka, it is reformulating many of the goals and objectives, which are still relevant to the country's economic development.

World Bank Group ICT Strategy

The vision: For the World Bank Group to be a catalyst in *improving access to information and communication technologies* and promoting its use for *stimulating economic growth, increasing equality, and reducing poverty.*

PILLAR 1	PILLAR 2	PILLAR 3	PILLAR 4	PILLAR 5
<p><i>Deepening and deepening regulatory and institutional reform</i></p> <p>...y-based and technical assistance operations to be... on:</p> <p>...egrated policy framework to... al with all elements of... ycal infrastructure.</p> <p>...gislative and regulatory forms required to facilitate... e commercial and social... ploitation of the Internet... ough e-commerce and e-... v. applications.</p> <p>...reater attention to the use of... e postal sector for the... livery of ICT services and... adcast media in develop-... nt.</p> <p>...gulatory development and... acy building to be... tended beyond initial... rms to ensure sustain-... ility.</p>	<p><i>Increasing access to information infrastructure</i></p> <p>Through the use of World Bank, IFC, and MIGA instruments and resources, the WBG will:</p> <ul style="list-style-type: none"> • Promote private sector leadership in extending the reach of ICT through the dev. of information infrastructure. • Support dev. of soft infrastructure such as software development, enabling technologies, and delivery and payment systems. • Provide technical and investment assistance to extend access beyond what commercial providers are prepared to provide. • Encourage specialized funds to provide one-time capital subsidies to promote access and local participation in nonprofit communication and information facilities. 	<p><i>Supporting ICT human capacity</i></p> <p>The WBG will support the development of a human capital base for exploiting ICT through:</p> <ul style="list-style-type: none"> • Support for the rollout of ICT in schools, colleges, and adult education. • Public Private Partnerships for technical skills training of the next generation of ICT workers. • Advice and skills training for entrepreneurs and government officials seeking to develop knowledge economy applications and industries. 	<p><i>Supporting ICT applications</i></p> <p>The WBG investments in ICT will support a wide range of business models and information technologies in operational projects by:</p> <ul style="list-style-type: none"> • Including ICT components in World Bank projects in all sectors but especially in education, health, finance, small business development, and public sector management. • Integrating ICT applications into Sector Strategy Papers, PRSPs, and the CAS process. • Focusing IFC investments on the use of ICT as a platform in applications that would enhance public, private, and social sector development. 	<p><i>Selectivity and evaluation</i></p> <p>The WBG will concentrate information infrastructure activities where the information infrastructure is acting as a bottleneck to development:</p> <ul style="list-style-type: none"> • Focusing assistance in countries at greatest risk of falling further behind those with the greatest potential to benefit from information infrastructure. • Supporting research and dissemination of knowledge about ICT and mobilizing local and international industries to focus directly on poverty alleviation through ICT. • Tracking a range of indicators of sector development to project success and ensure the rapid integration of lessons learned into new design.
<p>GICT will take a lead role in implementing these two pillars of the strategy, in coordination with World Bank Regions and sector units.</p>		<p>With the support of GICT, World Bank education sector units will take responsibility for implementing this pillar.</p>	<p>Implementing this pillar will ultimately be the responsibility of World Bank sector units, with the support of GICT.</p>	<p>Implementing this pillar will be the responsibility of all WBG units.</p>

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