



Draft Design and Monitoring Framework

Project Number: 38347

Nepal: Information and Communications Technology (ICT) Development Project

A design and monitoring framework is an active document, progressively updated and revised as necessary, particularly following any changes in project design and implementation. In accordance with ADB's public communications policy (2005), it is disclosed before appraisal of the project or program. This draft framework may change during processing of the project or program, and the revised version will be disclosed as an appendix to the report and recommendation of the President.

Asian Development Bank

DESIGN AND MONITORING FRAMEWORK

Design Summary	Performance Targets/Indicators	Data Sources/Reporting Mechanisms	Assumptions and Risks
<p>Impact Socioeconomic improvements in remote and rural communities through ICT</p> <p>Improved ICT uptake in the country (community, business, and government)</p>	<p>20% improvement in the livelihood and well-being of rural communities in 38 districts, within 3 years after project completion</p> <p>10% increase in the weighted average composite index of e-readiness, within 5 years after project completion</p>	<p>Compilation of government statistics</p> <p>Baseline study and impact monitoring report</p> <p>ADB project completion report</p> <p>ADB evaluation missions</p> <p>E-readiness and e-government index published by the United Nations, the International Telecommunication Union (ITU), and other organizations</p>	<p>Risk Volatile political and security situation in the country and particularly in remote rural areas, and therefore a slowdown in economic growth</p>
<p>Outcome ICT made more accessible, affordable, inclusive, sustainable, and useful to remote and rural communities</p> <p>Public services made more citizen-centered and business-friendly through ICT</p>	<p>10% increase in teledensity (both in terms of individual household and shared-facility telecenters) and 10% reduction in communication cost in project areas, within 3 years after project completion</p> <p>Financially and technically sustainable telecenter and wireless network operations of rural Internet service providers (ISPs), within 3 years after project completion</p> <p>20% increase in satisfaction with access and use of services (health, education, remittance, and government services) in rural communities and among businesspeople in 38 districts, within 3 years after project completion</p> <p>10% yearly increase in the ratio of online to over-the-counter government services, within 3 years after project completion</p> <p>10% increase in government service efficiency, within 3 years after project completion</p>	<p>ITU teledensity statistics</p> <p>Financial reports of rural ISPs</p> <p>ADB project completion report</p> <p>Project household, business, and government survey report</p>	<p>Assumptions Management and regulation of ICT and telecommunications sector in line with amended of Telecommunication Act of 1997</p> <p>Strong leadership in government to steer changes in information management by government, and in the way civil servants do their jobs and interact with the community</p> <p>Risk Communities' resistance to and unfamiliarity with new technologies</p>

Design Summary	Performance Targets/Indicators	Data Sources/Reporting Mechanisms	Assumptions and Risks
<p>Improved accessibility, efficiency, and transparency in government service delivery with the application of ICT</p> <p>Enhanced ICT business and industry</p>	<p>10% reduction in transaction costs to citizens for government services affected by the Project, within 3 years after project completion</p> <p>10% increase in job and business opportunities in the ICT industry, within 3 years after project completion</p>		
<p>Outputs</p> <p>1. Voice and broadband Internet connectivity through wireless fidelity (WiFi) technology and telecenters in all 75 districts in the country</p> <p>2. e-government framework and data infrastructure</p>	<p>WiFi broadband network and telecenters to be put up and tested initially in three districts—one each from the hill, mountain, and terai districts—within 2 years after the start of the Project</p> <p>Rural network operation and business model, as well as the related policy, legal, and regulatory framework, to be established in the remaining districts in the country after pilot-testing, within 3 years after the start of the Project</p> <p>WiFi broadband network and telecenters to be expanded and operated in the remaining 35 districts</p> <p>Enterprise architecture to be developed and adapted by the Government as the standard framework for e-government applications, within 1 year after the start of the Project</p> <p>Government information and data center (GIDC) to be established within 1 year after the start of the Project</p> <p>Government groupware comprising the principal functions of e-mail, document management, calendaring and scheduling, and conferencing and meetings, to be developed within 2 years after the start of the Project</p> <p>National identification (NID) system to be developed as a central database to share identification information commonly</p>	<p>Reports on the bid evaluation and awarding of contracts</p> <p>Project monitoring and progress reports</p> <p>Consultant reports</p> <p>ADB review missions</p> <p>Government policy, legal, and regulation statements</p>	<p>Assumptions</p> <p>Liberalization of voice over Internet protocol (VOIP)</p> <p>Existence of strong rural entrepreneurs, who go into the Internet service provider (ISP) business</p> <p>Strong interagency coordination and policy control among different ministries and departments for e-government development</p> <p>Risks</p> <p>Incumbent operator Nepal Telecom’s predatory pricing strategy in rural areas</p> <p>Civil servants’ resistance to adopting ICT in their work</p> <p>Civil servants’ resistance to providing online services because of traditional rent-seeking behaviors</p> <p>Lack of general ICT absorptive capacity and specialized technical capacity among government staff</p>

Design Summary	Performance Targets/Indicators	Data Sources/Reporting Mechanisms	Assumptions and Risks
<p>3. E-citizen services and applications for driver's license and land registration</p> <p>4. Nationwide human resources development (HRD) for e-government and ICT</p> <p>5. National ICT operating policies and guidelines to ensure interoperability with online technologies of government, business, and the broader community</p>	<p>required for public administration and services, within 2 years after the start of the Project</p> <p>Information and record management systems to be enhanced or developed as new systems for land and vehicle registration and licensing, and for government personnel information, within 3 years after the start of the Project</p> <p>Portal sites to be enhanced or developed as new systems, including government one-stop service and village network portal, within 3 years after the start of the Project</p> <p>Awareness building and training to be provided to the communities and governments affected by the Project, during project implementation</p> <p>ICT infrastructure, curriculum, and materials to be provided to civil servant training institutions, within 1 year after the start of the Project</p> <p>Academic courses in e-governance to be developed in cooperation with universities and colleges, within 2 years after the start of the Project</p> <p>National ICT operating policies and guidelines to be developed and endorsed by the Government, within 1 year after the start of the Project</p>		

Activities with Milestones	Inputs
<p>Component 1: Rural E-Community</p> <p>1.1. Develop a trial operation and business model for the wireless network and telecenters, by the end of month 3.</p> <p>1.2. Supply and install equipment, and commission network, by the end of month 12.</p> <p>1.3. Construct the network and install hardware and software in nine telecenters in three districts, by the end of month 18.</p> <p>1.4. Conduct community mobilization and training and awareness program in the pilot communities, by the end of month 24.</p> <p>1.5. Evaluate the pilot experiences, by the end of month 24.</p> <p>1.6. Develop a rural network operation and business model, as well as the related policy, legal, and regulatory framework, for scaling up, by the end of month 24.</p> <p>1.7. Construct the network and install hardware and software in 105 telecenters in the rest of the 35 districts, by the end of month 48.</p> <p>Component 2: e-Government Framework and Data Infrastructure</p> <p>2.1. Develop the enterprise architecture, by the end of month 18.</p> <p>2.2. Establish the GIDC, by the end of month 24.</p> <p>2.3. Develop government groupware, by the end of month 27.</p> <p>2.4. Develop the NID system, by the end of month 24.</p> <p>Component 3: E-Citizen Services</p> <p>3.1. Conduct business process reengineering as necessary, by the end of month 12.</p> <p>3.2. Develop 10 information and records management systems and five portal sites, by the end of month 36.</p> <p>Component 4: Human Resources Development (HRD)</p> <p>4.1. Carry out a national awareness campaign and conduct regular training during project implementation.</p> <p>4.2. Provide the ICT infrastructure, curriculum, and materials to civil servant training institutions, by the end of month 12.</p> <p>4.3. Develop academic courses in e-governance in cooperation with universities and colleges, by the end of month 24.</p> <p>Component 5: National ICT Operating Policies and Guidelines</p> <p>5.1. Develop the national ICT operating policies and guidelines for endorsement by the Government, by the end of month 6.</p>	<p>ADB grant of \$25 million, and Government of Nepal financing of \$6.2 million</p> <p>108 person-months of national project management consultants, comprising a team leader/ICT human resources development adviser (36 person-months), a network integration specialist (36 person-months), and a systems integration specialist (36 person-months)</p>

ADB = Asian Development Bank, EDCF = Economic Development Cooperation Fund, HRD = human resources development, ICT = information and communication technology, TA = technical assistance.