

ASIAN DEVELOPMENT BANK

TAR: STU 36635

TECHNICAL ASSISTANCE

FOR

PREPARING A PRO-POOR SUBREGIONAL E-GOVERNMENT PROJECT

FOR PROVIDING BASIC SERVICE DELIVERY

TO REMOTE COMMUNITIES

IN THE PACIFIC

May 2003

ABBREVIATIONS

ADB	–	Asian Development Bank
EIA	–	environmental impact assessment
ICT	–	information and communication technology
PDMC	–	Pacific developing member country
SOPAC	–	South Pacific Applied Geoscience Commission
TA	–	technical assistance
UNDP	–	United Nations Development Programme

NOTE

In this report, "\$" refers to US dollars.

This report was prepared by L. Bodda, Project Economist, Pacific Department.

I. INTRODUCTION

1. In September 2000, 137 heads of state and government adopted the Millennium Declaration that mainstreams a set of development goals, known as the Millennium Development Goals, into the global agenda.¹ The first such goal is to eradicate extreme poverty and hunger. Among the Millennium Development Goals is the need to build a global partnership for development (Goal 8) through (i) *addressing the special needs of small island developing states* (target 13); and (ii) *making available the benefits of new technologies, especially information and communications* (target 18).

2. The Asian Development Bank (ADB) is committed to reducing poverty. ADB also supports the main principle of universal access of the Okinawa Charter² that everyone should be enabled to participate in, and no one should be excluded from, the benefits of information and communication technology (ICT).

3. ADB's strategy for the Pacific³ emphasizes the importance of regional cooperation to collectively reap the benefits of economies of scale, and states that ADB will work with its Pacific developing member countries (PDMCs) to utilize ICT to overcome constraints associated with smallness and isolation, and to realize potential gains offered by links to global markets. The PDMC leaders are aware of the critical importance of ICT and regional cooperation and, according to a statement issued in 1999,⁴ envisages "a regional community in which the processes of work, commerce, learning, social interaction, and government are facilitated and enhanced by ICT, enabling all citizens to take part in opportunities brought by the global information economy."

4. This objective was reconfirmed during an ADB-financed workshop on ICT readiness in the Pacific held in 2002.⁵ This regional technical assistance (TA) seeks to assist the PDMCs in fostering cooperation and enhancing basic social service delivery to remote communities through the use of ICT while making governments more efficient, effective, accountable, and transparent.⁶ The TA framework is in Appendix 1.

II. ISSUES

5. The PDMCs are vulnerable to natural disasters, most have few resources, almost all are remote, and many do not have enough population to benefit from economies of scale.⁷ Poverty in the Pacific is not about lack of food; it is mainly the lack of access to basic services such as health and education that rely a great deal on information. In an address in early 2003, the President of ADB cited access to information as the "most critical factor in breaking the cycle of poverty."⁸

¹ United Nations. 2000. *United Nations Millennium Declaration A/RES/55/2*. New York.

² Global Information Society 2000. *The Principles of Universal Access*. Okinawa.

³ ADB. 2000. *A Pacific Strategy for the New Millennium*. Manila.

⁴ South Pacific Forum Secretariat. 1999. *The Vision for a Pacific Information Economy*. Suva, Fiji Islands.

⁵ ADB 2002. *Workshop on ICT Readiness in the Pacific*. Nadi, Fiji Islands, 29-31 July 2002.

⁶ The TA first appeared in *ADB Business Opportunities* (Internet version) on 6 November 2002.

⁷ ADB. 2001. *Poverty: Is It an Issue in the Pacific?* Manila.

⁸ World Summit of the Information Society 2003. *Keynote address by Tadao Chino, President of ADB*. Tokyo, Japan, January 2003.

6. ADB is helping the PDMCs to identify the extent and nature of poverty in the Pacific.⁹ The general perception is that poverty is increasing and that the limited capacity of the public administrations to provide basic social services and social protection are perceived by the poor themselves as the main causes of poverty and hardship.

7. Public administration is information intensive, and the geography of the Pacific makes communication difficult and expensive. ICT is becoming a cheap and effective way to collect, store, retrieve, and disseminate information. In particular, electronic means can be used by governments to realize large productivity and gains in the provision of services, especially social services to remote communities. E-government is a term that describes the use of ICT to promote more efficient and cost-effective government, facilitate more convenient government services, allow greater public access to information, ease social inclusion, and make government policies and activities more transparent and accountable. ICT can increase the speed, volume, quality, and transparency of transactions through faster access to, and distribution of, information. ICT also makes possible entirely new procedures, forms of transactions, interaction among people, information, and communications that were previously impossible because of high cost or unmanageability.

8. The needs, challenges, and opportunities that ICT offers to improve government service delivery in the Pacific were discussed during the ADB workshop on ICT in the Pacific¹⁰ among representatives of the PDMCs, the aid community, and other stakeholders, including private sector. It was agreed that e-government practices may be particularly beneficial in the PDMCs, given their highly dispersed geography, because ICT helps overcome the effects of distance and time.

9. The main challenge for the PDMC governments is to deliver basic social services in remote locations. Here ICT can play a pivotal role. ICT costs are decreasing and performances are increasing dramatically. Furthermore, ICT can be introduced and used according to scale, i.e., it can be matched to the ability of its users to pay. For instance, the global system for mobile communication facility can be used for short message service by low-income customers, voice communication by middle-income, and Internet browsing by those with high incomes.

10. External assistance to ICT for development in the PDMCs has come from a large number of donors, institutions, and regional organizations. Among the bilateral donors active in this arena are Australia, Japan, New Zealand, and United States. Among the multilateral and regional organizations are the Forum Secretariat, the International Telecommunication Union, the United Nations Development Programme (UNDP), the South Pacific Applied Geoscience Commission (SOPAC), and the World Health Organization. In particular, at the regional level, the Forum Secretariat, International Telecommunication Union, and UNDP are assisting the PDMCs in improving the policy and regulatory framework. The governments of Australia, Japan, New Zealand, United States are assisting in the regional provision of telehealth¹¹ and distance learning. The Pacific Disaster Center, SOPAC, and the South Pacific Regional Environmental Programme are assisting the region in disaster prevention and mitigation.

11. ADB is assisting the PDMC governments with several lending and non-lending products to improve the provision of basic social services to remote areas. In particular, it is assisting the

⁹ ADB. 2001. *Regional Technical Assistance for Consultation Workshops for Poverty Reduction Strategies in Selected Pacific Developing Member Countries*. Manila.

¹⁰ ADB Workshop on ICT in the Pacific. Nadi, Fiji Islands. 29-31 July 2002.

¹¹ Telehealth is defined as the use of advanced communications technologies to exchange health information and provide health care services across geographic, time, social, and cultural barriers.

education sector in Samoa and Tuvalu; the health sector in Papua New Guinea and in the Republic of the Marshall Islands; and the provision of services to outer-island communities in Cook Islands, Kiribati, and Vanuatu.

12. More specifically, ADB is assisting PDMCs with a regional ICT project to facilitate regional cooperation¹² and in preparing a regional project with the University of the South Pacific for extending the reach of distance learning in the Pacific. It is also assisting individual governments in increasing the government's service delivery, accountability, and transparency. For example, in Timor Leste, ADB is helping to rehabilitate the telecommunications sector.¹³ In Papua New Guinea, ADB is assisting in developing the financial management system¹⁴ and the integrated human resources management system.¹⁵ In the Marshall Islands, ADB is helping the Ministry of Health and Environment improve its health management information system.¹⁶ In the Fiji Islands, ADB is assisting the Native Lands Trust Board in establishing land boundaries through global positioning system devices.¹⁷ In the Federated States of Micronesia, ADB is helping to put national and state legislation on the world wide web.¹⁸

13. An ADB-financed regional TA on ICT assessment in the Pacific¹⁹ identified and discussed several possible e-government assistance projects at the national level²⁰ as well as the regional level.²¹ It also emphasized the opportunity to plan and implement a subregional e-government project, with easy maintenance, scalability, and replicability in other PDMCs, which would assist in addressing poverty and improving the quality of life in the PDMCs through enhanced basic social service delivery, statistics, citizen empowerment, disaster mitigation, and governance. This would be the first subregional loan to the Pacific from a development bank, and as such, its importance cannot be overstated. ICT is mature and available off the shelf,²² and ADB is the ideal position to assist the PDMC governments in easing poverty and hardship while enhancing service delivery, social inclusion, regional cooperation, and governance.

III. THE TECHNICAL ASSISTANCE

A. Purpose and Output

14. The main objective of the assistance is to contribute to economic growth and poverty reduction in remote and poor communities in the Pacific while fostering regional cooperation and governance. The objective of the TA is to assist PDMCs in assessing their e-government

¹² ADB. 2001. *Regional Technical Assistance for ICT Assessment in the Pacific*. Manila.

¹³ ADB. 2000. *Small-Scale Technical Assistance to East Timor for Rehabilitation of the Telecommunications Sector, Phase I*. Manila.

¹⁴ ADB. 1999. *Report and Recommendation of the President to the Board of Directors on a Proposed Loan to Papua New Guinea for Financial Management*. Manila.

¹⁵ ADB. 2001. *Report and Recommendation of the President to the Board of Directors on a Proposed Loan to Papua New Guinea for Public Service Program*. Manila.

¹⁶ ADB. 1994. *Report and Recommendation of the President to the Board of Directors on a Proposed Loan to the Republic of the Marshall Islands for Health and Population*. Manila.

¹⁷ ADB. 2000. *Technical Assistance to the Fiji Islands for Capacity Building of the Native Land Trust Board in Preparing Land Maps and Establishing Land Boundaries*. Manila.

¹⁸ ADB. 2000. *Technical Assistance to the Federated States of Micronesia for Improving Access to Laws*. Manila.

¹⁹ ADB. 2001. *Regional Technical Assistance for ICT Assessment in the Pacific*. Manila.

²⁰ Examples of e-government national assistance projects discussed were outer islands network in Kiribati and the Marshall Islands, SchoolNet in Samoa, Government of Tonga network, and ICT strategy in the Fiji Islands.

²¹ Examples of e-government regional assistance projects discussed were e-procurement, school networking, distance learning, and disaster mitigation network.

²² Off-the-shelf products are used "as is." Off-the-shelf products are designed to be easily installed and to inter-operate with existing system components. They are usually mass produced and have a relatively low cost.

demand and implementation capacity, mainly with reference to basic social service delivery to remote and disadvantaged communities. The TA will also identify and formulate a regional pro-poor e-government project for providing basic service delivery to remote communities, including a feasibility study suitable for financing by ADB or other external funding agencies, and assess its long-term sustainability.

15. The TA will achieve the following outputs in two selected PDMCs: (i) assessment of pro-poor e-government service delivery demand and implementation capacity; (ii) enhanced awareness of its possible benefits; (iii) review of best practices and lessons learned; (iv) preparation of a feasibility study for a subregional project for external financing; (v) recommendations for making the project sustainable and beneficial to the poor, and (vi) based on outcomes and progress made in the two selected PDMCs, dissemination of the lessons learned from the TA to other PDMCs.

B. Methodology and Key Activities

16. Implementation of the assistance will occur in two phases: (i) assessment of demand/supply and implementation capacity of pro-poor e-government social service delivery in remote areas; and (ii) development of a subregional project suitable for financing by ADB or other external funding agencies and assessment of its long-term sustainability.

17. Based on the priorities identified in the poverty reduction consultation workshops, Phase 1 will include (i) raising awareness of the possible benefits of pro-poor e-government social service delivery in remote areas; (ii) an assessment of implementation capacity, including available human resources; (iii) a review of best practices and lessons learned in the Pacific islands and other regions; (iv) in close consultation with stakeholders, formulation of a pro-poor subregional e-government project for providing basic service delivery to remote communities; and (v) identification of two PDMCs able and willing to invest resources to implement the project.

18. Based on the results of Phase 1, Phase 2 will develop a subregional project suitable for external financing. Phase 2 will (i) prepare a feasibility-level design for the project, including scope, components, cost estimates, implementation arrangements, and operation and maintenance procedures; (ii) undertake a detailed socioeconomic survey, poverty analysis, environmental examination (as required), and financial and economic evaluation of the project; (iii) assess the implementation capacity and future operation and maintenance capacity; (iv) propose institutional improvement to ensure efficient operation and maintenance and implementation of the project, including possible private sector participation; and (v) recommend the adoption of sustainable measures to ensure that the poor can benefit from the project.

19. To ensure full country commitment and TA success, during inception and prior to the commencement of Phase 2, the two selected PDMC governments will prepare and issue an ICT development policy letter. This document will demonstrate the relevant governments' commitment to taking ownership of the TA and its objective and purposes as well as to provide counterpart staff and other inputs in kind, as required.

C. Cost and Financing

20. The total cost of the TA is estimated at \$390,000 equivalent. ADB will provide \$290,000 equivalent. The TA will be financed by ADB on a grant basis from ADB's TA funding program. The governments involved will provide the balance of \$100,000 equivalent. Details of the TA

costs are shown in Appendix 2. The governments involved will be apprised that the provision of the TA does not commit ADB to finance any ensuing project.

D. Implementation Arrangements

21. ADB's Pacific Department will be the Executing Agency. In the two PDMCs selected, the ministry of finance (or its equivalent) will act as implementing agency for the TA. The TA will require approximately 6 person-months of an ICT expert international consultant (team leader) over 13 months, including around 1.5 person-months over 3 months for the Phase 1. The consultant will be selected on an individual basis. The TA will also require 3 person-months for short-term international consultancies, including social and economic analysis expertise. In addition, domestic consultants from the Philippines and PDMCs will be engaged to work at ADB headquarters and in the PDMCs for a total of 5 person-months to gather and organize data and information, help manage the TA, and facilitate stakeholders' awareness and participation.

22. The consultants will be engaged in accordance with ADB's *Guidelines on the Use of Consultants* and other arrangements satisfactory to ADB for the engagement of domestic consultants. The team leader will be in charge of coordinating inputs and outputs of individual team members. In the course of preparing the studies, consultants will visit the PDMCs as appropriate. The terms of reference for consulting services are detailed in Appendix 3.

23. The consultants will prepare an inception report within three weeks of the start of the services. The interim report, including information on the progress of the study, will be submitted within 3 months after the commencement of the consulting services. The draft final report, containing the findings and recommendations of the study, will be provided 1 month before the end of the consulting services for comments by ADB and the PDMC governments concerned. An integrated final report, incorporating the comments of the governments and ADB, will be prepared within a month after receipt of comments. The TA is expected to commence in November 2003 and be completed in December 2004.

IV. THE PRESIDENT'S DECISION

24. The President, acting under the authority delegated by the Board, has approved the provision of technical assistance not exceeding the equivalent of \$290,000 on a grant basis for Preparing a Pro-Poor Subregional E-Government Project for Providing Basic Service Delivery to Remote Communities in the Pacific, and hereby reports this action to the Board.

TECHNICAL ASSISTANCE FRAMEWORK

Design Summary	Performance Indicators/Targets	Monitoring Mechanisms	Assumptions and Risks
<p>Goal</p> <p>Contribute to economic growth and poverty reduction through improved access to basic services.</p>	<p>By November 2015</p> <p>Reduced incidence of rural poverty by 50% in participating countries.</p> <p>Make available the benefits of new technologies, especially information and communication technology (ICT).</p>	<ul style="list-style-type: none"> • Census data/household income and expenditure data • Poverty assessments • Asian Development Bank (ADB) project performance audit report 	
<p>Objective</p> <p>Foster regional cooperation and enhance the delivery of basic services to remote communities while making government(s) more efficient, effective, accountable and transparent.</p>	<p>By November 2010</p> <p>At least another 50 remote communities have reliable and affordable access to basic social services through ICT.</p> <p>At least 2 Pacific developing member countries (PDMCs) share the cost of some ICT technologies and applications.</p>	<p>Regional Reports and Statistics</p> <p>Government statistics and budget</p> <p>ADB project completion report of ensuing loan</p>	<p>Macroeconomic situation in the selected PDMCs remains conducive to economic growth and poverty reduction</p> <p>Governments committed and willing/able to cooperate</p>
<p>Outputs</p> <ol style="list-style-type: none"> 1. Assessment of e-government service delivery demand and supply in remote communities 2. Increased pro-poor e-government service delivery awareness and implementation capacity 3. Assessment of best practices and lessons learned 4. Concept papers of possible projects for ADB financing 	<ul style="list-style-type: none"> • Background papers on e-government service delivery readiness in the PDMCs are prepared by month 2. • Dissemination of the background papers to all PDMCs is complete by month 3. • Concept paper of possible subregional project is prepared and discussed by month 2-3. 	<p>Consultations with stakeholders</p> <p>ADB missions</p> <p>Review and progress reports</p> <p>Final report</p> <p>Tripartite meeting</p> <p>Review of the draft report and recommendation of the President and appendixes</p>	<p>There is adequate human resources.</p> <p>Willingness of governments to participate is sufficient.</p> <p>The necessary power and telecommunication facilities have been obtained.</p> <p>Sustainable system/technology have been selected.</p> <p>The system is financially sustainable.</p>

Design Summary	Performance Indicators/Targets	Monitoring Mechanisms	Assumptions and Risks
<p>5. Feasibility study at a level suitable for ADB financing</p> <p>6. Social and poverty impact assessments and plans</p> <p>7. Environmental impact assessment (EIA) and summary EIA, as required, acceptable to the Government, ADB, and other stakeholders</p> <p>8. Recommendations for making the Project sustainable and beneficial to the poor</p>	<ul style="list-style-type: none"> • At least two PDMCs express interest in participating in the project proposal by month 3. • Project framework is prepared and agreed on by month 6. • Issues on poverty and social impacts are adequately addressed and discussed by month 9. • Subregional project feasibility study of around \$3 million to a level suitable for ADB financing is complete by month 12. 		
<p>Activities</p> <p>Phase 1</p> <p>1. Preparation of background papers on e-government demand and supply and on implementation capacity in remote communities</p> <p>2. Review of best practices and lessons learned</p> <p>3. Dissemination of the background papers</p> <p>4. Preparation of concept papers for possible pro-poor e-government projects</p> <p>Phase 2</p> <p>5. Preparation of feasibility study at a level suitable for ADB financing</p> <p>6. Examination of the project's social, poverty, and environmental impact</p>	<p>From November 2003 to January 2004:</p> <ul style="list-style-type: none"> • Review of relevant studies with regard to e-government in the Pacific • Assessment of e-government strengths and weaknesses • Proposal of , and recommendations for, improvements • Consultation with stakeholders and formulation of concept paper <p>From January 2004 to December 2004:</p> <ul style="list-style-type: none"> • Identification of high-priority components of a project for ADB financing 	<ul style="list-style-type: none"> • Consultations with governments and other stakeholders • ADB missions • Tripartite meetings • Review of progress reports • Technical assistance (TA) final report 	<ul style="list-style-type: none"> • Availability of data and information • Willingness of government agencies to gather data and analyze results • Cooperation of involved agencies and local communities

Design Summary	Performance Indicators/Targets	Monitoring Mechanisms	Assumptions and Risks
<p>7. Preparation of poverty, social, resettlement action plans and EIA, as required</p> <p>8. Discussion of institutional capacity and institutional setting improvements to implement and maintain the project</p> <p>9. Discussion of solutions to benefit the poor</p> <p>10. Dissemination of the results to all the PDMCs</p>	<ul style="list-style-type: none"> • Preparation of feasibility-level design for project • Socioeconomic survey, initial environmental examination, and financial and economic evaluation of project • Summary EIA and resettlement framework, if required 		
Inputs	<ul style="list-style-type: none"> • 6 person-months of international consulting • 3 person-months of domestic consulting • Counterpart staff • Financial resources 	<ul style="list-style-type: none"> • ADB missions • Tripartite meetings • Review of progress reports • TA final report 	Close monitoring of the TA and timely fielding of ADB missions

COST ESTIMATES AND FINANCING PLAN
(\$)

Item	Total Cost
A. Asian Development Bank Financing^a	
1. Consultants	
a. Remuneration and Per Diem	
i. ICT Expert Consultant	120,000
ii. Short-Term Consultants	60,000
iii. Domestic Consultants	25,000
b. International and Local Travel	32,000
c. Reports and Communications	6,000
2. Training, Workshops, and Seminars	7,000
3. Miscellaneous TA Administration	5,000
4. Contingencies	35,000
Subtotal (A)	290,000
B. PDMCs Financing	
1. Remuneration and Per Diem of Counterpart Staff	70,000
2. Administrative Support	30,000
Subtotal (B)	100,000
Total	390,000

ICT = information and communication technology, PDMC = Pacific developing member country, TA = technical assistance.

^a Financed from Asian Development Bank's TA funding program.

Source: Asian Development Bank estimates.

OUTLINE TERMS OF REFERENCE FOR CONSULTANTS

A. Information and Communication Technology (ICT) Expert Consultant/Team Leader (6 person-months)

1. The ICT expert international consultant will have overall responsibility for the implementation of the technical assistance (TA). The consultant will

- (i) assess e-government basic service delivery demand and supply;
- (ii) assess e-government implementation capacity;
- (iii) discuss best practices and lessons learned;
- (iv) prepare feasibility studies for external financing; and
- (v) discuss institutional settings to ensure proper operation and maintenance.

2. The consultant's responsibilities will include the following:

- (i) Examine the current situation with respect to e-government basic service delivery in the Pacific developing member country (PDMC), and understanding the factors involved.
- (ii) Assess how the PDMC governments are using ICT, whether they are gaining sufficient access, and what education and training are available in the PDMC, and whether they are taking such education.
- (iii) Assess the readiness of the governments when necessary, to adopt or modify policies that will support tele-centers and basic service delivery to remote communities.
- (iv) Review recent experiences and lessons learned on similar e-government in the Pacific and propose ways to improve their efficacy and sustainability.
- (v) Examine trends for the development of tele-centers and similar e-government projects in the PDMCs, and assess the strengths and weaknesses of the PDMCs in furthering development. Prepare case studies and identify lessons learned.
- (vi) Provide an information base to help government and industry to make better informed decisions on the development and application of ICT.
- (vii) Coordinate with other assistance agencies on their respective agenda and roles in e-government assistance in the PDMCs.
- (viii) Develop and reach reasonable consensus on a prioritized list of strategic issues associated with the development of e-government basic service delivery in the PDMCs. Emphasis will be placed on identifying the barriers to participation (e.g., access, cost, time, education and training, financing, etc.) and the specific policies required to tackle them.
- (ix) Increase awareness and understanding of the value of e-government basic service delivery development.

- (x) Prepare the project implementation schedule, a Gantt chart showing the schedule, and a procurement schedule. Assess the project's technical risks and carry out sensitivity analysis to check project viability under these risks. Prepare terms of reference, expertise requirements, and person-month and cost estimates for implementation consulting services.
- (xi) Supervise the economic and financial analyses as well as poverty and environmental impact assessments of the proposed project (as required) in accordance with ADB guidelines.
- (xii) Value the cross-border benefit of the proposed subregional project by undertaking the distribution analysis of the country-based hard components and the cross-border soft component.
- (xiii) Value the full operation and maintenance costs of the proposed project and explore ways to increase private sector participation.
- (xiv) Ensure that, in carrying out the studies, the opinions of key stakeholders are particularly reflected, to make certain that poor and vulnerable consumers benefit from the project.
- (xv) In accordance with the poverty reduction strategy of the Asian Development Bank (ADB), demonstrate qualitatively and quantitatively how the proposed project will benefit mostly the poor and will help the subregion achieve socially inclusive development in terms of pro-poor growth, social development, and good governance.
- (xvi) Prepare a framework for the project and undertake any reasonable requests made by ADB in association with the TA.
- (xvii) Undertake any reasonable requests made by ADB in association with the project.

3. The consultant should have a wide working experience in ICT and e-government, especially in Pacific island countries.

B. Short-Term Consultantancies (3 person-months)

4. Short-term international consultants will be engaged for a total of 3 person-months to provide assistance to the principal ICT expert consultant and ADB staff. The specific skill requirements will be identified during TA implementation. The consultants will mainly act as technical support for the ICT expert consultant in the implementation of the TA. In fact, e-government service delivery is an extremely broad area and not all the expertise required could be found in a single person. The skills required will include social/poverty assessment and economic/financial analysis. Additional expertise required could span from e-procurement to in-depth knowledge of the distance-education and telehealth sector, to the drafting of legislation related to e-government, etc.

5. The responsibility of the **social/poverty expert** will include the following:

- (i) Organize surveys in the project area, and consult with relevant officials from the government and other organizations to supplement available secondary data.

Prepare an initial poverty and social analysis in accordance with ADB's *Handbook on Poverty and Social Analysis*. Prepare a poverty profile of the project area and project impact area. Clearly define the poverty line and the poverty incidence. Assess the pro-poor impact of the project in line with ADB's poverty reduction strategy. Provide a detailed discussion of the potential impacts on the economy in the project area, particularly on the poor. Identify ways to make the project of benefit to the poor.

- (ii) In consultation with local nongovernment organizations, identify the different project stakeholders; examine their existing rights and possible risks. Help the government to build public awareness and acceptance of the project. Prepare an initial social assessment, including land acquisition effects (if any) and any potentially adverse effects. Prepare a social analysis along ADB guidelines and an analysis of impacts on indigenous peoples (if required). The social analysis, the recommendations on changes in design to incorporate social dimensions, the analysis of indigenous people impacts, and the socioeconomic monitoring plans are separate outputs.
 - (iii) Design the land acquisition and resettlement plan, if required, in accordance with ADB's *Handbook on Resettlement*. If needed, include a baseline for monitoring and evaluating incomes and living standards, and for developing rehabilitation strategies. The plan will include eligibility criteria, compensation rates for assets lost, specific measures for the poor and vulnerable, time frame showing how those affected will be compensated, and a monitoring and evaluation plan.
 - (iv) Identify key environmental issues and help e-government to prepare the environmental impact assessment following ADB's format prescribed in the *Environmental Assessment Requirements and Environmental Review Procedures*.
 - (v) Prepare a summary environmental impact assessment. Assess other options for basic service delivery, if required. Compare their environmental and social sustainability.
6. The responsibility of the **economist/financial analyst** will include the following:
- (i) Assess the short-term (3 years) and long-term demand forecasts for e-government services in remote areas for different consumer categories. Provide a detailed discussion on the assumptions and methodology used in the demand forecast.
 - (ii) Analyze economic parameters and present the model for the least-cost solution. Provide quantitative and qualitative project benefits. Carry out an economic analysis including demand, least-cost and equalizing discount rate, economic viability, and risk analysis. Discuss alternative methodologies for carrying out the economic analysis and justify the method(s) chosen.
 - (iii) Provide a table detailing the conversion of economic cost from financial cost of the project and the specific conversion factors used. Incorporate an economic quantification of environmental impact due to the project.

- (iv) Discuss the assumptions and parameters used in the economic analysis, including consumers' willingness to pay and resource cost savings in relation to alternative options. Compare the shadow prices with those in similar projects and discuss justification for shadow prices. Identify and analyze economic uncertainties and carry out a risk analysis.