

**ASIAN DEVELOPMENT BANK**

**RRP: PAK 38135**

**REPORT AND RECOMMENDATION  
OF THE  
PRESIDENT  
TO THE  
BOARD OF DIRECTORS  
ON A  
PROPOSED LOAN  
TO THE  
ISLAMIC REPUBLIC OF PAKISTAN  
FOR THE  
MULTISECTOR REHABILITATION AND IMPROVEMENT PROJECT  
FOR  
AZAD JAMMU AND KASHMIR**

**November 2004**

## CURRENCY EQUIVALENTS

(as of 31 October 2004)

Currency Unit	–	Pakistan rupee/s (PRe/PRs)
PRe1.00	=	\$0.0167
\$1.00	=	PRs60.0

## ABBREVIATIONS

ADB	–	Asian Development Bank
ADP	–	annual development program
AJK	–	Azad Jammu and Kashmir
AJKED	–	AJK Electricity Department
AJKEPA	–	AJK Environmental Protection Agency
AJKG	–	government of AJK
AP	–	affected person
CBO	–	community-based organization
DHQ	–	district headquarters
DOH	–	Department of Health
EARPF	–	Environmental assessment review procedures framework
EMP	–	environmental management plan
IA	–	Implementing agency
IEE	–	initial environmental examination
IFAD	–	International Fund for Agriculture Development
LARP	–	land acquisition and resettlement plan
LCB	–	local competitive bidding
LGRDD	–	Local Government and Rural Development Department
M&E	–	Monitoring and evaluation
MDG	–	Millennium Development Goal
MIS	–	management information system
NGO	–	non-government organization
O&M	–	operation and maintenance
P&D	–	Planning and Development Department
PCU	–	project coordination unit
PDP	–	Perspective Development Plan
PHED	–	Public Health Engineering Department
PIO	–	project implementation officer
PIU	–	project implementation unit
PPMS	–	project performance management system
PSC	–	project steering committee
PWD	–	Public Works Department
RFPG	–	resettlement framework and procedural guidelines
SIEE	–	summary initial environmental examination
SMC	–	school management committee
SOE	–	statement of expenditures
SPRSS	–	summary poverty reduction and social strategy
THQ	–	tehsil (subdistrict) headquarters
UNDP	–	United Nations Development Programme
UNICEF	–	United Nations International Children's Emergency Fund
WAPDA	–	Water and Power Development Authority

## WEIGHTS AND MEASURES

ha	–	hectare
kV	–	kilovolt
MW	–	megawatt

## NOTES

- (i) The fiscal year (FY) of the Government ends on 30 June. FY before a calendar year denotes the year in which the fiscal year ends, e.g., FY2005 ends on 30 June 2005.
- (ii) In this report, "\$" refers to US dollars.
- (iii) The proposed Project will be carried out in Azad Jammu and Kashmir, an area over which Pakistan and India have been in dispute since 1947. By financing the proposed Project, the Asian Development Bank does not intend to make any judgment as to the legal or other status of any disputed territories or to prejudice the final determination of the parties' claims.

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## CONTENTS

	<b>Page</b>
LOAN AND PROJECT SUMMARY	iii
I. THE PROPOSAL	1
II. RATIONALE: SECTOR PERFORMANCE, PROBLEMS, AND OPPORTUNITIES	1
A. Existing Situation	1
B. The Government's Strategy	4
C. External Assistance	4
D. Lessons Learned	5
E. The Asian Development Bank's Strategy	5
III. THE PROPOSED PROJECT	5
A. Objective	5
B. Components and Outputs	5
C. Special Features	7
D. Cost Estimates	9
E. Financing Plan	9
F. Implementation Arrangements	10
IV. PROJECT BENEFITS, IMPACTS, AND RISKS	16
A. Project Benefits and Impacts	16
B. Risks	18
V. ASSURANCES	18
A. Specific Assurances	18
B. Conditions for Loan Effectiveness	20
C. Conditions for Disbursement	20
VI. RECOMMENDATION	20
APPENDIXES	
1. Project Framework	21
2. External Assistance	24
3. Component A: Rehabilitation and Improvement of Health Services	25
4. Component B: Rehabilitation and Improvement of Education Services	29
5. Component C: Rehabilitation and Improvement of Water Supply Systems	32
6. Component D: Rehabilitation of Roads and Bridges	34
7. Component E: Rehabilitation and Improvement of the Power Distribution Network	38
8. Detailed Cost Estimates and Financing Plan	41
9. Summary Poverty Reduction and Social Strategy	42
10. Environmental Assessment and Review Procedures Framework	46
11. Summary Resettlement Framework and Procedural Guidelines	49
12. Implementation Framework	52
13. Implementation Schedule	53
14. Proposed Contract Packages	54
15. Summary Initial Environmental Assessment	55

SUPPLEMENTARY APPENDIXES (available on request)

- A. Draft Terms of Reference for Consultants
- B. Resettlement Framework and Procedural Guidelines
- C. Initial Environmental Examination, and Environmental Assessment and Review Procedures Framework
- D. Economic Analysis
- E. Component A: Rehabilitation and Improvement of Health Services
- F. Component B: Rehabilitation and Improvement of Education Services
- G. Component C: Rehabilitation and Improvement of Water Supply Systems
- H. Component D: Rehabilitation of Roads and Bridges
- I. Component E: Rehabilitation and Improvement of Power Distribution Network

## **LOAN AND PROJECT SUMMARY**

<b>Borrower</b>	Islamic Republic of Pakistan
<b>Classification</b>	Targeting classification: Targeted intervention Sector: Health, Nutrition and Social protection Education Water Supply, Sanitation, and Waste Management Transportation and Communication, and Energy Subsector: Health systems, basic education, water supply and sanitation, roads and highways, transmission and distribution Themes: Sustainable economic growth, Human development, and Gender and development
<b>Environment Assessment</b>	Category B. A general overview of the environmental impacts of various components, along with the initial environmental examination (IEE) of two sample subprojects, is summarized as core Appendix 15 with details in Supplementary Appendix C. The IEEs of all subprojects will be carried out in accordance with the environmental assessment and review procedures framework in Appendix 10.
<b>Project Description</b>	This is the first Asian Development Bank (ADB)-supported investment project in Azad Jammu and Kashmir (AJK). The Project will make concerted efforts in rehabilitating and reconstructing essential physical and social infrastructure that could not be maintained during more than five decades mainly due to lack of security in the region. The Project has been formulated on the basis of a package of especially urgent needs in health, education, water supply, roads, and power sectors to fill the investment gap created over the past five decades in the above sectors. Such investments, together with the needed strengthening of related public agencies, are expected to provide the basis for sustainable economic growth and help reduce poverty in AJK.
<b>Rationale</b>	Due to security problems and the low level of investment in social and physical infrastructure, AJK has lagged behind in development and suffered from damage to infrastructure and displacement of people. Such damage has hampered the effective delivery of urban and rural services and considerably increased the poverty level. Hundreds of kilometers of roads, dozens of bridges, hundreds of schools, several health units and water supply systems are badly deteriorated. The health sector is constrained as none of the district hospitals has a proper accident and emergency department to efficiently handle emergencies. Every year about 4,000 people die and a greater number suffer from some kind of disability. Important departments like pediatrics, gynecology, and operation theaters lack essential basic

equipment. The situation of some tehsil (subdistrict) hospitals is even worse. The education sector is facing serious financial constraints in repairing seriously damaged school buildings. Furthermore, about 80% of all the schools have no facilities for safe drinking water and sanitation. Students, particularly girls, face serious problems. Existing water supply networks and water treatment plants in all the urban towns are in a poor condition. Typhoid, hepatitis, cholera, and other gastrointestinal water-related diseases have reached an alarming level. Regarding transportation, the mountainous terrain and river valleys in AJK require a significantly large number of bridges to provide the desired level of connectivity to rural areas representing about 87% of the AJK population, and to achieve economic and social benefits from better access to markets, schools, and hospitals and thus reduce poverty. Several deteriorated roads need urgent rehabilitation. The current power distribution network supplies poor quality and unreliable power due to high system losses, frequent outages, and significant voltage drops, which had been a major constraint to economic and social development. Current system losses are about 37%. The Government of AJK (AJKG) has prepared a plan—Improvement, Renovation, and Augmentation of Power Distribution Network in AJK—for which external financial assistance is urgently required.

Three major steps need to be taken to address the above issues: (i) urgent financing to address the existing significant backlog in basic social and physical infrastructure; (ii) strengthening of public agencies through extensive analysis of existing issues, inefficiencies, constraints, and accordingly undertaking specific measures and training considering best practices in regions under similar conditions; and (iii) strong government commitment to sustained operation and maintenance, public participation in all phases of development projects, cost recovery, and monitoring and evaluation (M&E) of the technical and financial operations and accordingly taking timely actions for ensuring the overall sustained operations. Such measures are expected to provide the basis for sustainable economic growth and help to reduce poverty in AJK. For this purpose the Government of Pakistan (the Government) requested the Asian Development Bank (ADB) to extend financial assistance for addressing the priority issues by processing a fast track project for AJK in 2004. In response, ADB fielded a Reconnaissance Mission in April 2004 and the Loan Fact-Finding Mission in May-June 2004 aiming to complete the loan processing within 2004.

## **Objective**

The Project aims to improve living conditions, quality of life, and economic prospects in AJK by rehabilitating and reconstructing essential physical and social infrastructure that have been damaged by decades of neglect. The Project will allow rapid improvement in the well-being of about 3.4 million people in AJK, mainly low-income communities. The Project will improve AJK's human capital base and contribute to the attainment of the

Millennium Development Goals by enhancing the quality of and access to social services. It will also boost economic growth by rehabilitating roads and power networks.

The Project will comprise the following components: (i) rehabilitation and improvement of health services, which includes extension and rehabilitation of accident and emergency departments of eight district headquarter (DHQ) hospitals and four selected tehsil headquarters (THQ) towns hospitals; (ii) rehabilitation and improvement of education services, which includes rehabilitation/reconstruction/improvement of selected primary, middle, and high schools; (iii) rehabilitation and improvement of water supply systems, which includes rehabilitation and extension of the existing water supply networks and treatment plants in seven DHQ towns and four THQ towns; (iv) rehabilitation of roads and bridges; and (v) rehabilitation and improvement of the power distribution network. Assessment of the institutional capacity of each implementing agency (IA) has been carried out and each component includes the required actions for strengthening institutional capacity to ensure sustainability of the existing and rehabilitated infrastructure.

#### Cost Estimates

The total cost of the Project is estimated at \$76 million equivalent, of which \$33.5 million is in foreign currency, and \$42.5 million equivalent is in local currency.

#### Financing Plan

Source	Financing (\$ million)			%
	Foreign Exchange	Local Currency	Total Cost	
Asian Development Bank	33.5	23.5	57.0	75
Government of Azad Jammu and Kashmir	0	19.0	19.0	25
<b>Total</b>	<b>33.5</b>	<b>42.5</b>	<b>76.0</b>	<b>100</b>

#### Loan Amount and Terms

It is proposed that ADB provide a loan in various currencies equivalent to Special Drawing Rights 38,031,000 (\$57 million equivalent) from ADB's Special Funds resources. The loan will have a term of 32 years, including a grace period of 8 years; an interest rate charge of 1% per annum during the grace period and 1.5% per annum thereafter; and such other terms and conditions set forth in the draft Loan Agreement.

#### Allocation and Relending Terms

ADB will provide the loan to the Islamic Republic of Pakistan, which will make the loan proceeds available to AJKG on the same basis as for past foreign assisted projects in AJK in which AJKG has not been required to repay the loans or pay any interest on services charges to the Government. The Government will bear any foreign exchange risk.

<b>Period of Utilization</b>	Until 30 June 2009
<b>Estimated Project Completion Date</b>	December 2008
<b>Executing Agency</b>	The Planning and Development Department (P&D) of AJK will be the coordinating Executing Agency (EA) for the entire Project. The Implementing Agency (IA) will be the Department of Health for component A, the Education Department for component B, the Public Works Department for components C and D, and the Electricity Department for component E. For the suspension bridges and footbridges under component D, the IA will be the Local Government and Rural Development Department. Each IA will establish a project implementation unit (PIU) to implement its respective project component.
<b>Implementation Arrangements</b>	P&D will establish a project coordination unit (PCU) as its secretariat. The PCU, comprising professional staff with the support of a team of consultants, will assist IAs by giving them technical support and guidance in implementing project activities; undertake institutional strengthening for them; and support M&E. The PIU of each IA will execute the project activities. The consultants will help the PIUs prepare detailed designs, and procurement for civil works, equipment, and materials.
<b>Procurement</b>	<p>Procurement under the Project will be carried out in accordance with ADB's <i>Guidelines for Procurement</i>, and the Government's procedures acceptable to ADB.</p> <p>Civil works under components A, B, C, and D, are not likely to attract international contractors because of the wide geographic spread of the subprojects and small size of the packages, and because of the security and other frequently changing matters relevant to accessing the project area. In addition, detailed designs for certain works will not be prepared before bidding; rather, works will be bid based on simple standard designs and quantities and will be refined during construction. Therefore, local procurement procedures acceptable to ADB will be the preferred mode. Similarly, supply contracts are unlikely to attract international suppliers because of difficult security conditions in the area. For components A and E, where equipment for hospitals and the power distribution network is required, as much as possible procurement will be undertaken using local competitive bidding procedures or international shopping as appropriate.</p>
<b>Consulting Services</b>	An input of 1,340 person-months of domestic consulting services is planned. Consultants to be financed under the Project will be selected and engaged in accordance with the quality- and cost-based selection (QCBS) method of ADB's <i>Guidelines on the Use of Consultants</i> or other arrangements satisfactory to ADB for engaging domestic consultants.

## **Project Benefits and Beneficiaries**

About 46% of the households in AJK live below the poverty line. Low-income rural and urban communities live in underserved settlements with poor infrastructure facilities and services. Areas that have faced the most security issues experience poverty levels estimated to range from 70% to 90%, much higher than that for the rest of AJK. The field surveys during the Loan Fact-Finding Mission demonstrated that the majority of the existing physical and social infrastructure were either damaged or have long passed their useful life. Until this infrastructure is restored, it will not be possible for communities in the areas to restore their living conditions, even to a very basic level, and begin the long process of catching up with the development that has been available to the rest of the country for the past more than five decades.

The Project will improve living conditions and the quality of life of about 3.4 million people in AJK by rehabilitating and reconstructing essential physical and social infrastructure affected by decades of neglect. The improved roads will provide both urban and rural communities with access to better health and education services. The beneficiaries of power rehabilitation are industry, fishery, agriculture, livestock production, housing, education, health, water supply, and irrigation. Improved water supply and good quality water will decrease waterborne diseases. The savings on medical expenses of poor households could be used for family well-being. The improved quality of and access to drinking water of poor communities in the project area will reduce the time women spend in fetching water. Improved hospital and health services will have greater impact on the health condition of the population in the project area. Improved pediatric and the gynecological services will improve the health conditions of children and their mothers.

## **Risks and Assumptions**

Major risks associated with the Project follow:

- (i) the security situation may again worsen and delay project implementation;
- (ii) given that this is ADB's first operation in AJK, the Project faces some implementation risk, and the capacity of IAs may not be sufficiently improved to implement the Project successfully; and
- (iii) IAs may not successfully address minor land acquisition and resettlement issues in accordance with the resettlement framework (Appendix 11).

Tension is considered unlikely to return in the near future. With regard to the implementation risk and capacity of IAs, the Project will engage design and implementation consultants, and non-government organizations to support each IA and its PIU. Several IAs have experience with internationally funded projects. For all subprojects requiring land acquisition or resettlement, land acquisition and resettlement plans will be prepared. These would be submitted to ADB for approval before any land acquisition or displacement takes place.

## I. THE PROPOSAL

1. I submit for your approval the following report and recommendation on a proposed loan to the Islamic Republic of Pakistan for the Multisector Rehabilitation and Improvement Project for Azad Jammu and Kashmir (AJK).

## II. RATIONALE: SECTOR PERFORMANCE, PROBLEMS, AND OPPORTUNITIES

2. Due to lack of security, and a low level of investment in social and physical infrastructure, AJK has lagged behind in development and suffered from damage to infrastructure and displacement of people. The situation has hampered the effective delivery of urban and rural services and considerably increased the poverty level. Hundreds of kilometers of roads, dozens of bridges, hundreds of schools, several health units, and power and water supply systems are badly deteriorated. Sustained investments to bridge gaps in various sectors, with priority on rehabilitation of existing deteriorated infrastructure and strengthening of public agencies, are expected to provide the basis for sustainable economic growth and help reduce poverty in AJK. For this purpose, the Government of Pakistan (the Government) requested the Asian Development Bank (ADB) to extend financial assistance for addressing the priority issues by processing a fast-track project for AJK in 2004. In response, ADB fielded a Reconnaissance Mission in April 2004 and the Loan Fact-Finding Mission in May-June 2004. The proposed Project (the project framework is in Appendix 1) is the first development assistance of ADB in AJK. It represents the outcome of wide consultation with stakeholders including the people and their elected representatives, non-government organizations (NGOs), and the concerned departments of the government of AJK (AJKG) and the Government.

3. The Ministry of Kashmir Affairs and Northern Affairs serves as a link between the Government and AJKG. AJK has a parliamentary form of government, with the President as the constitutional head, and the Prime Minister, supported by a council of ministers, as the chief executive. AJK has two divisions (Muzaffarabad and Mirpur) and seven administrative districts, with Muzaffarabad City as the capital.<sup>1</sup> AJK has a population of about 3.4 million people, 87% of whom live in rural areas with no indigenous people. The majority of the rural population depend on forestry and agriculture for their livelihood. The average per capita income is only between \$200 and \$250, half the average income of a Pakistani. With the mountainous terrain and scattered rural settlements and a few major urban centers, poverty is fairly evenly distributed across AJK. Unemployment ranges from 35 to 50%. The latest United Nations Development Programme (UNDP) report shows that Pakistan's human development index rank has dropped to 144 among 175 countries, and is lower than that of other countries in South Asia, including Bangladesh, India, and Sri Lanka. In line with the national trends, indicators of social sector achievement in AJK did not improve much in the 1990s. Sustained effort for social sector development will be required in AJK, considering that the literacy rate is 62%, infant mortality rate is 56 per 1,000 live births, and immunization rate for children under 2 years is 46%.

### A. Existing Situation

4. **Health.** AJK has a reasonable network of primary health care services, including an adequate network of referral hospitals. However, none of the district hospitals has a proper Accident and Emergency Department for efficiently handling different types of emergencies including obstetric emergencies. Important departments like pediatrics, cardiac and operation theaters lack essential basic equipment. Furthermore, accommodations for doctors, paramedics, and nurses are limited in most hospitals. The situation of tehsil hospitals is even worse, particularly in Athmuqam, Burnala, Fatehpur, and Kahuta. Many have been partly or completely damaged.

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<sup>1</sup> AJK has 7 districts and 18 tehsils or subdistricts. Districts and tehsils are local government units under a corporate municipal administration.

Due to lack of access to proper health services, every year a large number of people die in those areas. The most vulnerable groups like women and children have been greatly affected. Major problems and weaknesses of tehsil hospitals include limited inpatient facilities; absent or non-functioning operation theaters; lack of diagnostic services like X-ray machine and laboratory facilities; no proper buildings for an outpatient department (OPD) and administrative staff; absence/shortage of doctors, nurses, and paramedics due to lack of accommodations; and lack of incentives to work in remote and isolated areas.

5. On the average, 75,000 patients are admitted in district hospitals every year; out of them, 32,000 are for some form of emergency. Due to the limited capacity of accident and emergency departments, every year about 4,000 people die and a greater number suffer from some kind of disability. Out of the annually reported 500 serious burn cases, more than 50% die due to the absence of life-saving equipment. Many lives could be saved and disabilities prevented if the accident and emergency departments are rehabilitated, the transportation system improved with adequate ambulances, adequate number of doctors and paramedical staff posted and trained, and essential life-saving equipment made available. AJKG needs urgent external financing for the rehabilitation of accident and emergency departments in all eight district headquarter (DHQ) hospitals, rehabilitation of four seriously damaged tehsil (THQ) hospitals, accommodations for doctors and nurses in remote areas, and specific training for staff to enhance their technical capacity.

6. **Education.** AJK's literacy rate is estimated to be 62%, about 56% among females and 80% among males. Only 10% of females and 18% of males complete high school and only 4% of women and 13% of men are able to go beyond high school. Education has been a priority area of the AJKG as about 27% of its total recurring budget is allocated to that sector. However, AJKG faces serious financial constraints for repair/reconstruction of school buildings that have been seriously damaged. About 900 schools (primary, middle, and high schools) require urgent repair and furniture and equipment. Shortage of funds and climatic factors like heavy snowfall/rainfall have rendered many of these buildings unusable and dangerous. Furthermore, about 80% of all the schools in AJK have no facilities for safe drinking water and sanitation and students, particularly girls, face serious difficulties, which result in absenteeism and other problems such as serious waterborne diseases. AJKG requires urgent financial assistance to repair dangerous school buildings where hundreds of students are at high risk, provide water and sanitation for all schools, train teaching staff, and build the capacity of the education department.

7. **Water Supply and Drainage.** The existing water supply network and water treatment plants in all major towns in AJK are in poor condition, and in most areas the quality of water does not meet the prescribed World Health Organization standards. A survey of hospitals carried out during the Loan Fact-Finding Mission indicates that typhoid, hepatitis, cholera, and other gastrointestinal water-related diseases have reached an alarming level. Despite the abundance of water throughout the year in streams and river tributaries, almost all urban centers face water scarcity. Residents of unserved settlements have to rely on unsafe sources, such as rivers, contaminated open wells, springs, and natural streams. Contamination of water source(s), intermittent supply, intermixing of sewerage and water pipelines due to inadequate spacing and faulty joints and old leaking pipes are major issues that require urgent attention. The AJKG continues to spend funds from its annual development program (ADP) to improve water supply service, but those are inadequate to completely address the deficiencies. It is urgent that the water supply and sanitation systems be improved in a planned, systematic, and phased manner to

enhance living conditions and the quality of life of the urban communities in AJK<sup>2</sup> and to strengthen the capacity of the related agencies to ensure sustained delivery of services.

8. **Roads and Bridges.** The mountainous terrain and river valleys in AJK require a significantly large number of bridges to provide the desired level of connectivity to the rural areas, and to achieve economic and social benefits from better access to markets, schools, and hospitals, and thus reduce poverty. Currently, bridges are very few and most of them have already completed their useful life. Furthermore, destruction of roads and shortage of funds and limited capacity of the Public Works Department (PWD) have resulted in severe deterioration of the road network. The situation is exacerbated by poor construction quality and extreme climate conditions that result in a large backlog of road rehabilitation and reconstruction. At present, about \$25 million is urgently needed to rehabilitate priority roads and bridges, construct about 20 suspension bridges to link large rural communities to nearby urban centers, and build the capacity of PWD to ensure that it evolves into an efficient road agency. Improvement of primary roads will reduce transportation costs, enhance subregional connectivity, facilitate trade, and promote regional peace and harmony.

9. **Power.** The current power distribution network connects electricity to about 70% of the population and 95% of the villages. However, the network has not been adequately operated and maintained due to insufficient investment and system losses are high; therefore the power supply is of poor quality characterized by frequent outages and significant voltage drops. The current overall system losses of the power distribution network are in the level of 37%,<sup>3</sup> which is unacceptably high and not sustainable. The losses are attributed to (i) insufficient grid stations, (ii) lengthy and overloaded feeders/lines, (iii) damaged/overloaded transformers, (iv) slow, damaged/obsolete meters, (v) poor maintenance facilities, and (vi) inadequate billing systems. To address (ii), (iii), (iv), and (v), AJK Electricity Department (AJKED) engaged a consulting firm in 1995 to assess the state of various feeders and make plans for rehabilitating and augmenting the distribution network. Survey and mapping of the existing distribution network are almost complete and engineering and detailed designs are expected to be completed by December 2004. On this basis of the study, AJKED has prepared a plan—Improvement, Renovation, and Augmentation of Power Distribution Network in AJK—for which external financial assistance is needed. To address item (i), the Water and Power Development Authority of the Government has prepared a plan for augmenting and expanding the grid stations in consultation with AJKED; to address item (vi), AJKED has initiated the development of a computerized billing system.

10. Three major steps need to be taken simultaneously to address the above issues: (i) urgent financing to address the existing significant backlog of basic social and physical infrastructure; (ii) strengthening public agencies through extensive analysis of existing issues, inefficiencies, constraints, and accordingly undertaking specific measures and training, keeping in view the best practices employed in the region under similar conditions; and (iii) securing the Government's strong commitment to sustained operation and maintenance (O&M), public participation in all phases of development projects, cost recovery, and monitoring and evaluation (M&E) of the technical and institutional operations and, as a result of M&E, taking necessary actions in a timely manner to ensure overall sustained operations.

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<sup>2</sup> The World Bank has been addressing water and sanitation problems in rural areas in AJK since the early 1990s. For improving drainage and sanitation and sewerage treatment, AJKG plans to undertake comprehensive feasibility studies including environmental improvement works, with its annual development funds.

<sup>3</sup> Based on data provided by AJK Electricity Department (AJKED), technical losses are estimated at 20-22%, while administrative losses are 15-17%.

## **B. The Government's Strategy**

11. The Government is concerned about the low levels of social and communication services and believes that greater investment will accelerate productivity gains, reduce poverty, and promote smaller, healthier, and better-educated families. For development to catch up in the context of the national plan, a Public Sector Development Program of PRs70 billion (about \$1,218 million) was proposed for AJK, which was the minimum requirement to clear the accumulated backlog. The 10-Year Perspective Development Plan (PDP) 2001-2011 of AJK, was formulated within the broad economic and social parameters of the national plan tailored to the specific needs and imperatives of the area as dictated by development goals and aspirations of the people. Efficient growth and improvement in the quality of life are the two main objectives of the PDP. These objectives could be realized through improvement of infrastructure for growth in AJK; public services like health, education, and water for all; and generation of employment opportunities. The investment priorities of AJKG outlined in the PDP are hydroelectric power generation, transport and communication, education, health, water supply, rural development, resource management, information technology, industries, and agriculture. AJKG believes that greater investment in basic rural/urban development services will accelerate gains in productivity, reduce poverty, and improve economic conditions in AJK. The Project is formulated to support the Government's initiatives for poverty reduction and economic development in line with PDP 2001-2011. The Project will also help AJKG and its concerned departments build confidence for undertaking future large investments.

## **C. External Assistance**

12. International and domestic agencies have been working in AJK and supporting a wide range of development and rehabilitation activities in various sectors. The United Nations High Commissioner for Refugees and the International Committee of the Red Cross play a vital humanitarian and security role. Other agencies include the Food and Agriculture Organization, United Nations International Children's Emergency Fund (UNICEF), UNDP, World Food Programme, bilateral agencies, and large number of international and local NGOs. Appendix 2 gives more information.

13. The World Bank is supporting community-based social and economic infrastructure. At present, the World Bank is providing support to AJK through the Community Infrastructure Services Project, Protected Area Management (Machiara Park), and Northern Education Project. The International Fund for Agriculture Development (IFAD) is funding AJK Community Development Project, and UNICEF has extended assistance for Integrated Rural Water Supply. UNDP has completed its Area Development Program in AJK, which included community development, fisheries and sericulture development, human resource development, program coordination and strengthening of the Planning and Development Department (P&D) of AJKG, and a microcredit program. The Program was implemented in both northern and southern parts of AJK. Another UNDP initiative for urban poverty reduction through the National Urban Poverty Alleviation Project which is at start-up stage, focuses on development of human resources particularly through strengthening the technical skills of youth in information technology and other technical areas. Bilateral agencies, including France, Norway, and the United Kingdom are also supporting rehabilitation and extension of social and physical infrastructure in rural areas covering health and education facilities, water supply and sanitation, agriculture, shelter, roads, and income generation.

14. A few NGOs are working in AJK. In recent years they have formed community-based organizations for implementing development projects on health, water, education, and community development. Community organizations and village banks have been formed through the microcredit program of IFAD. The efforts of NGOs and aid organizations have initiated a process for involving local communities, especially the poor, in local level-development activities.

## **D. Lessons Learned**

15. A review of ADB-wide experience with rehabilitation assistance indicates that projects should (i) be prepared as quickly as possible, (ii) focus on restoring facilities, (iii) feature a flexible implementation process, (iv) provide strong consulting support and ADB supervision during implementation, (v) be supported by equally quick action by the Government, and (vi) be completed entirely.

16. Other lessons learned from earlier assistance in Pakistan follow: (i) beneficiary participation must be ensured during project preparation and implementation; (ii) environment and social aspects should be considered during implementation, since situations when rapid response is needed may not be evident before the approval of the project; (iii) arrangements for disbursements should give quick and simple access to funds; (iv) the adopted approach should permit flexible adjustment of project design during implementation; (v) criteria for subproject selection should permit simple prioritization and short implementation periods but ensure a balance among communities and maximum benefits to the community; (vi) there is need for close and frequent monitoring to ensure transparency and facilitate implementation; and (vii) there is need to coordinate the large number of government and externally assisted rehabilitation and new programs in the project areas, as well as the various sectors covered under the proposed Project. The proposed Project has been carefully designed to reflect each of those lessons.

## **E. The Asian Development Bank's Strategy**

17. The focus of ADB's country strategy and program update (CSPU) for Pakistan (2004–2006) is on reducing poverty by providing assistance in key strategic areas of sustainable pro-poor economic growth inclusive of social development. The strategy continues to be relevant and in line with the new government's priorities. The proposed Project supports the focus of CSPU on the sectors of transport, and basic urban services. ADB's emphasis will remain on improving delivery of social services through increased public sector allocations. *Water for All: the Water Policy of the Asian Development Bank* (2001) also supports ADB's strategy for poverty reduction by addressing each of the three framework elements of poverty reduction: pro-poor sustainable growth, social development, and good governance. The main focus of ADB assistance to the urban sector will be on the environmental aspects and needs of the poor, and will also cover the attainment of the Millennium Development Goals (MDGs).

# **III. THE PROPOSED PROJECT**

## **A. Objective**

18. The objective of the Project is to improve living conditions, quality of life, and economic prospects in AJK by rehabilitating and reconstructing essential physical and social infrastructure that have been damaged by decades of neglect. The Project will provide for rapid improvement in the well-being of about 3.4 million people in AJK, mainly low-income communities. The Project will improve AJK's human capital base and contribute to the attainment of the MDGs in AJK by the quality of and access to social services. It will also boost economic growth by rehabilitating the roads and power networks.

## **B. Components and Outputs**

19. The Project will comprise the following components: (i) rehabilitation and improvement of health services, (ii) rehabilitation and improvement of education services, (iii) rehabilitation and improvement of water supply systems, (iv) rehabilitation of roads and bridges, and (v) rehabilitation and improvement of the power distribution network. Assessment of the institutional capacity of each implementing agency (IA) has been carried out and each component includes the required

actions for strengthening institutional capacity to ensure sustainability of the existing and rehabilitated infrastructure. Paras. 20-26 describe the project components.

### **1. Component A: Rehabilitation and Improvement of Health Services**

20. This component will include (i) extension and rehabilitation of accident and emergency departments of eight DHQ<sup>4</sup> hospitals including civil works and provision of needed medical equipment; (ii) rehabilitation of THQ hospitals at Athmuqam, Burnala, Fathehpur, and Kahuta through repair and renovation of existing buildings and rehabilitation/reconstruction of a 30-bed ward with an operation theater and other necessary services; construction of hostels for nurses/other staff and accommodations for doctors; and provision of diagnostic facilities like X-ray machine, laboratory and electrocardiogram machine; (iii) provision of essential equipment to pediatric and gynecology departments at the DHQ and THQ hospitals, focusing on upgrading maternity facilities for enhanced services to vulnerable women and reducing maternal and infant mortality rates; (iv) construction of proper waiting areas and provision of public toilets and clean drinking water for visitors at the above DHQ and THQ hospitals; (v) consultancy assistance for the design and construction supervision of civil works and procurement of equipment, and for enhancing the technical capacity of doctors, nurses, and paramedical staff through training; and (vi) funding of recurrent expenditure of the project implementation unit (PIU) and the salaries of PIU staff and the required additional doctors, nurses, and paramedical staff. Under item (vi) the Project will finance the salaries on a declining basis: 100% in year 1, 75% in year 2, 50% and 25% in years 3 and 4, respectively. AJKG will retain and fully finance staff from its recurring budget onward from year 5 of the Project. Details are in Appendix 3.

### **2. Component B: Rehabilitation and Improvement of Education Services**

21. This component will rehabilitate facilities and provide other support required immediately to restore and improve education services, including (i) rehabilitation/reconstruction of 30 damaged primary schools and 7 damaged middle school buildings; (ii) repair and improvement of about 56 middle schools and 56 high schools as per agreed-upon criteria; (iii) provision of water and sanitation facilities to all schools where such facilities are inadequate; (iv) consultancy assistance to the education department to build capacity by training the teaching staff including in-service training of follow-up learning material, developing a comprehensive management information system (MIS), improving management and planning capacity of the education department, and design and construction of civil works; (v) strengthening of school management committees (SMCs) through community mobilization and training; and (vi) funding of recurrent expenditure of the PIU and salaries of the PIU staff. Under item (vi), the Project will finance the salaries of PIU staff on a declining basis: 100% during year 1, 75% in year 2, 50% in year 3, and 25% in year 4. Details are in Appendix 4

22. As a matter of priority, all schools in the project area will be provided latrines and connections for safe drinking water, and health and hygiene education will be promoted. The Project will monitor the effects of improvements in water quality on health, especially on child stunting, by organizing a representative sample study and project performance management system (PPMS).

### **3. Component C: Rehabilitation and Improvement of Water Supply Systems**

23. This component will improve living conditions and the quality of life in urban communities where water is scarce and unsafe for human consumption. Component C will include (i) rehabilitation and extension of the existing water supply networks and treatment plants in all seven DHQ towns and four selected THQ towns; and (ii) consultancy assistance to build the capacity of the Public Health Engineering Department (PHED) by providing technical and financial

<sup>4</sup> Comprising seven DHQs hospitals and the Abbas Institute in Muzaffarabad District.

management training for organizing and efficiently managing water supply functions in a sustained and cost-effective manner, as well as for design and construction supervision of civil and mechanical works; and (iii) funding of recurrent expenditure of the PIU and salaries of the PIU staff and the required additional staff of the IA. Under item (iii), the Project will finance the salaries of staff on a declining basis: 100% during year 1, 75% in year 2, 50% in year 3, and 25% in year 4. AJKG plans to undertake sanitation works through its ADP. Further Details are in Appendix 5.

#### **4. Component D: Rehabilitation of Roads and Bridges**

24. The objectives of the road component are to give the rural population in AJK access to livelihood and social services, thereby reducing poverty; and contribute to economic development through improved road infrastructure. Improving primary roads will reduce transportation costs, enhance subregional connectivity, facilitate trade, and promote regional peace and harmony. The road component will cover rehabilitation and improvement of roads to provide inter- and intra-district links and thus improve subregional connectivity; and construction of major bridges, suspension bridges for jeeps, and suspension footbridges to provide access to remote areas. Physical improvements will be supplemented by institutional improvements in PWD.

25. This component will comprise (i) rehabilitation and improvement of a minimum of 130 kilometers (km) of the primary road network; (ii) construction/replacement of a minimum of 650 meters (m) of major bridges on the primary roads; (iii) construction of about 1,050 m of suspension bridges for jeeps on secondary/tertiary roads; (iv) construction of about 1,050 m of suspension footbridges to improve connectivity of remote communities; (v) policy reforms, capacity building for PWD, and improvements in civil works procurement procedures; and (vi) funding of recurrent expenditure of the PIU and salaries of the PIU staff. Under item (vi), the Project will finance the salaries of PIU staff on a declining basis: 100% during year 1, 75% in year 2, 50% in year 3, and 25% in year 4. Details are in Appendix 6.

#### **5. Component E: Rehabilitation and Improvement of the Power Distribution Network**

26. This component will help to reduce system losses and improve the reliability of the existing power distribution network through (i) rehabilitation and augmentation of about 750 km of 11 kilovolt (kV) lines; (ii) rehabilitation and augmentation of about 900 km of 0.4 kV lines; (iii) replacement and addition of 11 kV/0.4 kV transformers; (iv) rehabilitation and augmentation of service connections; (v) procurement of necessary equipment and tools for adequate O&M of the power distribution network; (vi) consulting services for implementing this component and capacity building of AJKED; and (vii) funding of recurrent expenditure of the PIU and salaries of the PIU staff and required additional staff of the IA. Under item (vii), the Project will finance the salaries of staff on a declining basis: 100% during year 1, 75% in year 2, 50% in year 3, and 25% in year 4. Details are in Appendix 7.

#### **C. Special Features**

27. This is the first ADB-supported investment project in AJK to make concerted efforts in rehabilitating and improving essential physical and social infrastructure that had been damaged by decades of neglect. The Project has been formulated on the basis of a package of especially urgent needs that will fill the investment gap created over the past five decades in various sectors, with priority on rehabilitation of existing deteriorated infrastructure. Such investments together with strengthening of the respective public agencies are expected to provide the basis for sustainable economic growth and help reduce poverty in AJK.

## **1. Sector Loan Approach with Some Innovations**

28. To meet the urgent rehabilitation and reconstruction needs, the Project will adopt a sector approach with some innovations. This approach recognizes that rehabilitation needs differ among the sectors covered by the Project. In two sectors (health and water supply) where urgent rehabilitation needs are concentrated in district headquarters, the project investments have been appraised as for a project loan. In three sectors (education, power, and roads) where urgent rehabilitation needs are scattered throughout AJK, a limited number of subprojects have been appraised during loan formulation for immediate implementation upon loan effectiveness as for a sector loan. For the appraisal, selection, and implementation of additional subprojects, selection criteria and frameworks covering environmental assessment, land acquisition/resettlement, and financial and economic analyses have been developed and agreed to by AJKG and ADB. The frameworks will guide the selection and implementation of subprojects that will be appraised by the project coordination unit (PCU) and the PIUs, with the help of the project management consultants and design/supervision consultants, and approved by the PCU in consultation with ADB. The first two subprojects in each sector and all subprojects above the agreed-upon threshold will be reviewed and approved by ADB. The institutional capacity of IAs in AJK is considered adequate, as many are already implementing internationally funded projects following the respective sector policies. This approach differs from ADB's standard sector loan modality, which normally covers only one sector and includes a detailed sector development plan. The Project will cover multiple sectors, and the policy dialogue will center on significant institutional strengthening for the line ministries in AJK for prioritization of development projects and development of sector plans. This approach recognizes AJKG's commitment to developing a systematic policy response to development in AJK, as well as the need for flexibility in implementing the Project in a region that must deal with significant infrastructure degradation.

## **2. Implementation and Institutional Capacity Building**

29. Although several IAs do have experience with internationally funded projects, but considering this is the first ADB-funded project in AJK, the project team has paid special attention to building implementation and institutional capacity in the IAs to ensure smooth implementation and sustainability of, not only the interventions under the Project but also those in all other existing and future projects. The Project will engage design and implementation consultants, and NGOs to support and train the IAs and the PIUs. Their work will focus on line agencies and deal with (i) preparation of the subprojects, including appraisal, conducting due diligence for all aspects, following ADB's safeguard policies; (ii) detailed design, preparation of bidding documents, and evaluation of bids; and (iii) construction supervision, including checking of adherence to safeguard arrangements. The consultants will train staff engaged under the PCU and the PIUs.

30. The planned interventions for institutional strengthening are as follows: (i) health component—the capacity of doctors, nurses and paramedics, and Department of Health (DOH) staff will be enhanced through training with a focus on management of trauma and emergency critical care; the quality of all existing in-service training centers will be improved through provision of teaching aids and equipment, and training of trainers; capacity building will also include institutionalizing a hospital asset management system; (ii) education component—training will be provided to the teaching staff including in-service training of follow-up learning material, developing a comprehensive MIS, improving the management and planning capacity of the education department, and design and construction of civil works, and strengthening of SMCs through community mobilization and training; quality-based bonus will be provided to primary teachers recommended by SMC on the basis of their performance and application of training received; (iii) water supply—planned interventions include training in technical and financial management, mapping and asset management, improving municipal financial management by introducing improved accounting procedures including budgeting, resource mobilization, enhanced O&M of

assets, and improved billing, revenue collection, and reporting systems; a detailed study on tariff setting and demand analysis will be undertaken and regulatory systems will be established to ensure that laws, standards, rules, and regulations are equitably and consistently applied; (iv) roads and bridges—capacity building for PWD will include institutionalizing a road asset management system, training in technical aspects, project management and contract administration, and introduction of geographic information system; and (v) power component—assistance will be provided to strengthen sector governance, enhance AJKED's financial performance, and institute various programs and measures to improve its operating efficiency and performance, to introduce a computerized billing system and improve accounting and audit procedures. Furthermore, institutional specialists will identify and fully analyze the list of needed reforms under each component, and prepare in consultation with the AJKG and ADB a plan for implementing key reforms under the Project and other reforms in future projects.

31. In the health, water supply, and power sectors, the Project addresses the issue of shortage of staff by extending funds for the salaries of essentially required additional staff on a declining basis: 100% in year 1, 75% in year 2, 50% in year 3, and 25% in year 4. AJKG will retain and fully finance staff from its recurring budget onward from year 5 of the Project. Thus, the AJKG will gradually and easily absorb this staff. Performance-based incentives (bonuses) have been proposed for teachers. Through SMCs, communities' involvement in construction and O&M of primary schools will help ensure good-quality construction and sustainable operations. The proposed intensive training of all agencies, particularly in technical and financial management, will not only ensure sustainability of project facilities, but also provide AJK agencies with confidence for executing similar large projects in the future.

#### D. Cost Estimates

32. The total cost of the Project is estimated at \$76 million equivalent including taxes and duties, of which \$33.5 million equivalent (44.1%) is the foreign exchange cost including \$1.4 million in interest charges during construction, and \$42.5 million equivalent (55.9%) is the local currency costs. Table 1 summarizes the estimated cost. Appendix 8 has the details.

**Table 1: Cost Estimates**  
(\$ million)

Item	Foreign Exchange	Local Currency	Total Cost
<b>A. Base Cost</b>			
1. Component A. Rehabilitation and Improvement of Health Services	6.8	2.1	8.9
2. Component B. Rehabilitation and Improvement of Education Services	1.0	3.5	4.5
3. Component C. Improvement of Water Supply System	3.8	3.6	7.4
4. Component D. Rehabilitation of Roads and Bridges	5.7	15.1	20.8
5. Component E. Rehabilitation and Improvement of Power Distribution Network	13.3	2.2	15.5
6. Project Implementation Assistance <sup>a</sup>	0	8.1	8.1
7. Taxes and Duties	0	5.7	5.7
<b>Subtotal (A)</b>	<b>30.6</b>	<b>40.3</b>	<b>70.9</b>
<b>B. Contingencies</b>			
1. Physical Contingencies	1.5	2.0	3.5
2. Price Contingencies	0	0.2	0.2
<b>Subtotal (B)</b>	<b>1.5</b>	<b>2.2</b>	<b>3.7</b>
<b>C. Fee and Charges during Implementation</b>	<b>1.4</b>	<b>0</b>	<b>1.4</b>
<b>Total</b>	<b>33.5</b>	<b>42.5</b>	<b>76.0</b>

<sup>a</sup> Project implementation assistance includes \$4.3 million as cost of consultancy for the project coordination unit (PCU) and project implementation units (PIUs), and \$3.8 million for incremental administrative costs, equipment, and operational costs for PCU and all PIUs.

#### E. Financing Plan

33. It is proposed that ADB provide a loan of Special Drawing Rights (SDR) 38,031,000 (\$57 million equivalent) from its Special Funds resources, which will represent 75% of the total cost of

the Project. The ADB loan will have a term of 32 years, including a grace period of 8 years; an interest rate charge of 1% per annum during the grace period and 1.5% per annum thereafter; and such other terms and conditions set forth in the draft Loan Agreement.

34. The loan will cover the entire foreign exchange cost of the Project in the amount of \$33.5 million equivalent (including interest and other charges amounting to \$1.4 million), and will finance \$23.5 million equivalent, or 55.3%, of the local currency cost. The local currency cost to be financed by the ADB loan will cover portions of the civil works, vehicles, consulting services and project management support, but excluding duties and taxes. ADB's financing of the local currency expenditure is justified by the nature of the Project, which will address poverty, gender, and environment issues in the project areas.

35. ADB will provide the loan to the Islamic Republic of Pakistan, which will make the loan proceeds available to AJKG on the same basis as for past foreign assisted projects in AJK in which AJKG has not been required to repay the loans or pay any interest on service charges to the Government. The Government will bear any foreign exchange risk. Funds will be allocated to each IA as entitlement on the basis of estimated specific investment plans within the agreed-upon project scope. The design of the funds to be utilized will create incentives for IAs to draw down the entitled shares, or otherwise lose shares because of poor performance. The unused shares may be reallocated to other IAs, based on their performance evaluation.

**Table 2: Financing Plan**  
(\$ million)

<b>Source</b>	<b>Foreign Exchange</b>	<b>Local Currency</b>	<b>Total Cost</b>	<b>%</b>
ADB	33.5	23.5	57.0	75
Government of AJK	0	19.0	19.0	25
<b>Total</b>	<b>33.5</b>	<b>42.5</b>	<b>76.0</b>	<b>100%</b>

ADB = Asian Development Bank, AJK = Azad Jammu and Kashmir.

## **F. Implementation Arrangements**

### **1. Project Management**

36. P&D of AJK will be the coordinating Executing Agency (EA) for the entire Project. The IAs will be the DOH for component A, Education Department for component B, PWD for components C and D, and AJKED for component E. For the suspension bridges and footbridges under component D, the IA will be the Local Government and Rural Development Department (LGRDD). Each IA will establish a PIU to implement the respective project components.

37. P&D will establish a PCU headed by the full-time Project Coordinator, located at the P&D secretariat, who will be recruited before the loan approval. The PCU, comprising five professional staff and an accounts officer, will (i) act as a support unit for the PIUs by providing them guidance in implementing project activities and by facilitating interdepartmental coordination; (ii) provide technical support in recruiting consultants for PIUs, and through a technical group within PCU; (iii) undertake M&E of the project activities; and (iv) ensure compliance with safeguards including environmental (through close coordination with the Environmental Protection Agency - EPA), and land acquisition and resettlement. To ensure that gender issues are adequately addressed during project preparation, design, and implementation, the existing women's cell in P&D headed by an assistant director will actively assist the PCU by liaising with all the PIUs and preparing and implementing the respective gender action plans based on the agreed-upon gender strategy (Appendix 9).

38. Each PIU, headed by the project implementation officer, will comprise professional and support staff and will work in close collaboration with the respective department officials and PCU. The PCU will provide each PIU an accounts officer and a technical support team of consultants, to assist the PIUs in preparing detailed designs and bidding documents, evaluating bids and awarding contracts, executing project components, and undertaking environmental and social assessments in accordance with the environmental assessment review procedures framework (EARPF, Appendix 10) and resettlement framework and procedural guidelines (Appendix 11), respectively, to ensure compliance with ADB's safeguard policies. The implementation framework of the Project is in Appendix 12.

39. A project steering committee (PSC)—headed by the additional chief secretary of P&D, AJKG with a representative of the Planning Commission, Government of Pakistan, and secretaries from DOH, education department, PWD, LGRDD, AJKED, and finance, as members—has been set up at P&D in Muzaffarabad to ensure smooth and orderly implementation besides providing policy guidance and resolving interagency problems. The Project Coordinator will be the Secretary of the PSC. PSC meetings will be held as required, but at least once every 3 months.

## **2. Implementation Period**

40. The Project will be implemented over a period of 4 years, and will be completed in December 2008. The implementation schedule is in Appendix 13.

## **3. Procurement of Civil Works and Equipment**

41. Procurement under the Project will be in accordance with ADB's *Guidelines for Procurement*, and the Government's tender procedures acceptable to ADB. Considering the urgent need for the rehabilitation of infrastructure after many years of neglect in areas in AJK with security issues, ADB's procurement guidelines need to be flexibly interpreted. For civil works under components A, B, C, and D, because of the wide geographic spread of the subprojects and small size of the packages, and because of security and other frequently changing matters relevant to accessing the project area, the works are not likely to attract international contractors. In addition, detailed designs for certain works will not be prepared before bidding; rather, works will be bid based on simple standard designs and quantities, to be refined during construction. Therefore, local procurement using procedures acceptable to ADB will be the preferred mode. Similarly, supply contracts are unlikely to attract international suppliers because of difficult security conditions in the area. Therefore, for components A and E, where equipment for hospitals and the power distribution network is required, as much as possible, procurement will use local competitive bidding (LCB) procedures or international shopping as appropriate. All procurement contracts will include standard anticorruption provisions.

42. Civil works for components A, B, C, and D will be packaged in a range of values, to suit the varying capacities of domestic contractors. Most civil works contracts will be below \$1 million equivalent, except for a very few that may be in the range of \$1 million—\$3 million. Civil works with estimated values of more than \$1 million, but less than \$3 million will be procured following LCB procedures. Civil works with estimated values of less than \$1 million may be procured either through LCB or by special procedures that may include community-based contracts,<sup>5</sup> or similar arrangements, acceptable to ADB. A managed small-scale contractors scheme under a supervision consultant or a management contractor may also be used. LCB civil works procurement will typically utilize single-stage, two-envelope procedures acceptable to ADB, and bidding periods of not less than 21 days. For procurement using international competitive bidding

<sup>5</sup> ADB. 2001. *Project Administration Instruction, Procurement, para. 3.05*, Appendix 2: A Guide on Community Participation in Procurement), will be used as reference during implementation.

(ICB), if any, ADB's standard bidding procedures<sup>6</sup> for procurement of civil works without prequalification will be applied, with a bid submission period of 45 days.

43. Equipment and materials valued at more than \$0.5 million equivalent will be procured under ICB, those valued for \$0.3 million-\$0.5 million equivalent by international shopping, and those valued at \$0.3 million equivalent or less by local procedures acceptable to ADB. Appendix 14 shows the proposed contract packages.

44. The standard bidding documents for subprojects under each component will be reviewed one time by ADB to ensure that they remain current with ADB requirements. ADB's approval will be required for all civil works contracts valued at more than \$500,000 for components A, B, and C, those valued at \$1,000,000 for components D and E, and all supply contracts valued at more than \$300,000 for all components. ADB's approval will be initially required for the first two contracts for civil works and supply contracts for each component valued at more than \$300,000 and more than \$100,000, respectively, before the award of the respective contracts. Once ADB is satisfied with the procedures being followed by the P&D and the IAs, the dollar value limit for contracts requiring prior approval may be revised with the approval of ADB, based on demonstrated capacity. For contracts valued at less than these agreed-upon approval amounts, the first contract package of each component will also be subject to ADB review and approval. For subsequent contracts, ADB will review only annual work plans and undertake selective post facto reviews. However, if ADB does not approve the award or terms of any such contract, the Government will not use loan proceeds to finance such contract, and in the event that loan proceeds are used to finance such a contract, the Government will refund to ADB any such payment.

45. Certain minor items of equipment, which are estimated to cost, in the aggregate, less than the equivalent of \$100,000, may be procured through direct purchase in accordance with procedures acceptable to ADB.

46. At the Government's request, ADB has approved advance action for procurement of civil works and supply contracts, including inviting and receiving bids for contracts up to the stage of ADB's approval of the IA's recommendation for award of contract before the date of loan effectiveness. Advance action will help avoid initial start-up delays and facilitate award of most of the contract packages immediately after loan effectiveness. The Government has been advised that ADB's approval of advance action does not commit ADB to financing the Project or the procurement costs.

#### **4. Consulting Services**

47. To support project implementation, as well as build the capacity of the IAs, 1,340 person-months of domestic consulting services will be required: (i) package A: project management and implementation support to the PCU and the PIUs of components A and B, including subproject detailed design, construction supervision, and monitoring and evaluation (650 person-months including 128 person-months for capacity building); (ii) package B: implementation support to the PIUs of components C, D, and E (690 person-months including 74 person-months of capacity building). Supplementary Appendix A gives more details.

48. For environmental assessments, monitoring and management, 36 person-months of domestic consulting services will be assigned to the PCU to assist in preparing the initial environmental examination (IEE) reports for various subprojects being considered for ADB financing. The IEEs will be prepared in accordance with the agreed-upon EARPF (Appendix 10), ADB's *Environment Policy* 2002 and *Environmental Assessment Guidelines* 2003, and AJKG

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<sup>6</sup> ADB. 2004. *Standard Bidding Document for Procurement of Civil Works*. Manila.

regulations. The consultants will also assist in enhancing the capacity of concerned institutions in monitoring environmental impacts and compliance with the provisions of environmental management plans (EMPs) in the IEEs. In this context the PIUs of the concerned line agencies and the AJK Environmental Protection Agency (AJKEPA) will be strengthened, as appropriate. AJKEPA will also assist in strengthening these line agencies.

49. All consultants to be financed under the Project will be selected and engaged in accordance with the ADB's *Guidelines on the Use of Consultants* and other arrangements satisfactory to ADB for engaging domestic consultants. Because of the wide geographic spread of the subprojects, and security and other frequently changing matters relevant to accessing the project area, consulting services are unlikely to attract international firms. Adequate capabilities exist for these services to be provided by domestic consultants.

50. The Government has requested ADB's approval of advance action for the recruitment of consultants. The Government has been advised that ADB's approval of advance recruitment action does not commit ADB to financing the Project or the recruitment costs.

## **5. Disbursement Arrangements**

51. The PCU will ensure that each IA will prepare disbursement projections, request budgetary allocations for counterpart funds, collect supporting documents, and prepare withdrawal applications and send them to ADB in accordance with ADB's *Loan Disbursement Handbook*, January 2001 as amended from time to time. Immediately after loan effectiveness. An imprest account will be established at the National Bank of Pakistan, Muzaffarabad branch, for each of (i) P&D for PCU and project coordination expenses, (ii) DOH for component A, (iii) Education Department for component B, (iv) PWD for component C and D, (v) LGRDD for suspension bridges and footbridges under component D, and (vi) Electricity Department for component E, in each case to meet eligible expenditures under the Project. The establishment of the imprest accounts will be subject to the appointment of qualified account staff and the establishment of internal controls by PCU and each IA acceptable to ADB. The initial combined amount to be deposited into all imprest accounts will not exceed the lesser of 3 months estimated project expenditures or 10% of the loan amount. The statement of expenditures (SOE) procedure may be used for reimbursing eligible expenditures and liquidating advances provided into the imprest accounts. Any individual payment to be reimbursed or liquidated under the SOE procedure will not exceed the equivalent of \$100,000. The imprest accounts will be managed, replenished and liquidated in accordance with ADB's *Loan Disbursement Handbook* (January 2001) as amended from time to time, and detailed arrangements between the Government and ADB.

52. The PCU will disburse funds directly for the activities including capital and operating costs of the PCU; consultants, technical support team offices, capacity building and training activities, and related expenditures for monitoring, review, and evaluations.

## **6. Accounting, Auditing, and Reporting**

53. P&D and each IA will maintain records and accounts adequate to identify works, goods, and services financed by the loan proceeds. Specifically, P&D and each IA will (i) maintain separate accounts for the Project; (ii) ensure that project accounts and financial statements are audited annually in accordance with sound accounting principles by independent auditors acceptable to ADB; and (iii) furnish the PCU for consolidation and delivery to ADB, not later than 6 months after the close of each fiscal year with certified copies of audited accounts and financial statements and the report of the auditor on these, including the auditors' opinion on the use of the imprest accounts and SOE procedures.

54. P&D and each IA will prepare quarterly progress reports in a format acceptable to ADB, which will provide information on (i) progress made against established targets, including pre-identified monitoring indicators; (ii) delays and problems encountered, and actions taken to resolve them; (iii) compliance with loan covenants; and (iv) proposed program of activities for the next quarter. The PCU will consolidate the reports of all IAs and deliver them to ADB. Within 3 months of physical completion of the Project, each IA will prepare a project completion report and submit it to the PCU for delivery to ADB.

## **7. Selection and Approval of Subprojects**

55. Since the Project will adopt a sector approach in the design and implementation of various subprojects, subprojects will be selected on the basis of selection criteria agreed upon by the Government and AJKG, and set out for each component in Appendixes 3, 4, 5, 6, and 7, respectively. In addition, regardless of the sector, each subproject will be proposed on the basis of the following general criteria:

- (i) The subproject will rehabilitate or reconstruct damaged infrastructure, and/or directly address the requirements of the people of AJK. The subproject will be the part of an annual plan proposed by the IA for the relevant component.
- (ii) The subproject will have a clear economic rationale. The rationale will include an analysis of the market for the subproject's output and an assessment of market demands. The proposed subproject must be technically feasible, the least-cost solution, and economically cost-effective.
- (iii) The subproject will be sustainable. Financial sustainability is demonstrated if the financial internal rate of return is equal to or higher than the weighted average cost of capital for those subprojects where usages are charged to users, where relevant. If this criterion is not met for a subproject, then arrangements will be made for that subproject to ensure that O&M costs of the subproject are financed and that the subproject operates over its expected life. Institutional sustainability may be demonstrated by assessing the IA's organization, staffing, and skill sets for the subproject and providing capacity building under the Project.
- (iv) The proposed subproject is environmentally sound as determined through an environmental examination carried out in accordance with applicable laws and regulations of AJKG, ADB's *Environment Policy* 2002 and the agreed-upon EARPF.
- (v) The proposed subproject will have had a social impact assessment, and an assessment of possible land acquisition and resettlement issues as set out in the resettlement framework and procedural guidelines (RFPG, Supplementary Appendix B, and summarized in Appendix 11). If there is any land acquisition or involuntary resettlement, a resettlement plan will have been prepared in accordance with applicable laws and regulations of AJKG, ADB's *Policy on Involuntary Resettlement* (1995), and RFPG (Appendix 11).
- (vi) The equipment, materials, and other resources required can be acquired in, or transported to, the subproject location without unreasonable obstruction or delay.

## **8. Land Acquisition and Resettlement**

56. Out of five project components, it is expected that only components C and D may require minor land acquisition: 1 ha in component C and 45 ha in component D. To address these minor impacts and comply with ADB's *Policy on Involuntary Resettlement*, the RFPG was formulated by AJKG. For all subprojects that may require land acquisition or resettlement, land acquisition and

resettlement plans (LARPs) will be prepared in accordance with the Land Acquisition Act of 1994, as amended, and associated regulations, ADB's *Policy on Involuntary Resettlement* (1995), and the RFPG. These will be submitted to ADB for approval before any land acquisition takes place. The RFPG will provide the framework for formulating an appropriate resettlement plan for any subproject with resettlement impacts that will be approved during loan implementation. The RFPG and the approved LARPs will be posted on the ADB web site, and circulated to all affected towns and villages.

## **9. Environmental Assessments and Monitoring**

57. The Project is classified as an environmental category "B" project in accordance with ADB's *Environment Policy 2002* as the primary focus is on rehabilitation of existing social infrastructure. The Project has been designed and will be flexibly implemented following a sector loan modality. An overview of the environmental impacts of various components, along with an IEE carried out for two sample subprojects, is summarized in Appendix 15 (details in Supplementary Appendix C). Based on the overview and the sample IEEs, no significantly adverse environmental impacts are anticipated; as such a detailed environmental impact assessment is not required. Selection and approval of all subprojects will be governed by criteria that, among other factors, include degree of impacts on the environment. In addition, an EARPF has been developed to guide environmental assessment of subprojects during implementation (Appendix 10). All subprojects of all components will be subject to the EARPF. The IEEs will include an EMP, detailing mitigating measures and a monitoring plan. Compliance with environmental safeguards in all subprojects will be mainstreamed by incorporating measures to mitigate potentially adverse impacts as part of subproject design, construction, and operation. Approval of subprojects with estimated costs exceeding \$1.5 million equivalent will be subject to approval of an IEE by ADB. All other subprojects will be approved by AJKEPA. Following approval by AJKEPA, the summary environmental assessment together with the two sample summary IEEs, and the EARPF will be posted on the ADB web site.

## **10. Project Performance Monitoring and Evaluation**

58. A performance monitoring system, satisfactory to ADB will be established, based on the key indicators and targets outlined in the project framework. The PCU, with the assistance of project-financed consultants, will develop comprehensive PPMS procedures and plans in accordance with the *ADB's Project Performance Monitoring System Handbook* within 9 months of loan effectiveness. The PPMS procedures, performance indicators, and their targets will be reviewed and approved by ADB. Benchmark surveys will be conducted before project implementation. The PCU, with the help of its consultant, will then undertake every 6 months quantitative and qualitative project performance monitoring for each project component to evaluate the delivery of planned facilities and the project benefits that accrued. The PIUs will assist the PCU in collecting baseline data and carrying out PPMS activities.

## **11. Project Review**

59. The Project will be reviewed jointly by the PCU, each IA, and ADB every 4 months to assess progress and at midterm more comprehensively. Taking into account the performance monitoring results from the PPMS, the midterm review (MTR) will (i) evaluate the project scope, design, and implementation arrangements; (ii) evaluate the progress of institutional reform, and infrastructure development components; (iii) identify changes needed in any or all of the above areas; (iv) assess implementation performance against agreed-upon targets in the project framework; (v) identify critical issues and constraints, if any; and (vi) recommend adjustments to the project design and/or implementation arrangements, if necessary. The MTR will identify any

slow-moving component and recommend remedial measures. The MTR Mission may recommend reallocation of funds from poorly performing components to better performing ones.

#### IV. PROJECT BENEFITS, IMPACTS, AND RISKS

##### A. Project Benefits and Impacts

60. Estimates<sup>7</sup> from a socioeconomic survey show that about 46% of the households in AJK live below the poverty line.<sup>8</sup> The unemployment rate is about 37.5% and the larger part of the unemployed are domestic workers, mostly women. Low-income rural and urban communities live in underserved settlements with poor infrastructure facilities and services. The areas that have faced the most security issues experience poverty levels estimated to range from 70% to 90%, which are much higher than in the rest of the areas in AJK. The field surveys during the Loan Fact-Finding Mission demonstrated that the majority of the existing physical and social infrastructure was either damaged or has long passed its useful life. Until this infrastructure is restored, it will not be possible for communities in the areas to restore their living conditions, even at a very basic level, and begin the long process of catching up with the development that has been available to the rest of the country for the past more than five decades. A summary poverty reduction and social strategy is provided in Appendix 9.

61. The Project will (i) improve living conditions, the quality of life, and economic prospects in AJK by rehabilitating and reconstructing essential physical and social infrastructure that had been damaged by decades of neglect; (ii) ensure a rapid improvement in the well-being of about 3.4 million people in AJK, mainly low-income communities; (iii) improve AJK's human capital base and contribute to attainment of the MDGs in AJK by the quality of and access to social services; and also boost economic growth by rehabilitating roads and power network.

62. Improved roads will provide both urban and rural communities with access to better health and education services. Travel time and vehicle operating costs will be reduced, and the reductions will in turn result in greater availability of transport services, lower agricultural input costs, and higher agricultural output prices. Improved road networks will create better access to markets, employment, and services. Establishment of basic facilities on the roadside, such as waiting areas (benches and shade) and basic toilet facilities, will keep passengers safe and comfortable. Construction work will give the poor seasonal income-earning opportunities.

63. Electricity growth has a direct bearing on gross domestic product growth. The beneficiaries of power rehabilitation are industry, fishery, agriculture, livestock production, housing, education, health, water supply, and irrigation. Electricity will benefit the whole population and improve living standards. Improved water supply and quality of water will help reduce waterborne diseases. Savings on medical expenses in poor households can be used for family well-being. Improved quality of and access to drinking water for poor communities in the project area will reduce the time that women spend fetching in water. An awareness campaign for increased use of piped water will be conducted in areas where people depend on unsafe spring water for drinking. Improved hospital and health services will have a large impact on the health condition of the population in the project area. Improved pediatric, obstetric, and gynecological services will improve the health conditions of children and their mothers. Improved hospital care in the tehsil hospitals will give the poor access to better health services. Improved health will increase the productivity of the poor.

64. The Project will maximize impacts on women through various project components. In component A, gynecological, obstetric, and pediatric units in district and tehsil hospitals will be

<sup>7</sup> World Bank. 9 May 2002. *Project Appraisal Document, AJK CISP*. Washington, DC.

<sup>8</sup> The poverty line is estimated to be Rs2,500–3,000 per month per household.

expanded and provided with essential equipment, additional delivery tables in the labor room, and adequate number of women gynecologists. The changes will upgrade maternity facilities to enhance services to vulnerable women and reduce maternal and infant mortality rates. In component B, SMCs will be mobilized to increase the enrollment of girls in primary and middle schools. Separate toilets will be built for girls and female teachers. In component C, women organizations in the project area will be involved in implementing at the grassroots level the community awareness program for use of pipe water. In component D, roadside waiting areas for passengers will be built with separate bench for women and children. Separate toilets for women will be built near the waiting areas. The M&E system of each PIU will develop a gender-disaggregated database to monitor project impact on women. Communities and particularly women will be involved in the process of preparing and implementing the subprojects, with intensive consultations through consultants and NGOs.

65. The Project will use methodologies conducive to community participation, local capacity building, provision of employment, and provision of venues for those wishing to share their experiences. This approach will support the local community's sense of ownership.

66. **Economic and Financial Assessment.** Considering the urgent need for rehabilitating essential social and physical infrastructure to provide relief to 3.4 million people, the economic justification of the Project has been based primarily on the economic theory of evaluating public choices through direct evidence.<sup>9</sup> For this purpose, a socioeconomic survey along with random opinion polls was undertaken to find out perceived public preferences and identify what people consider the most important and the least important components. The data obtained concluded that safe water supply was the top priority followed by health, education, electricity, and roads, respectively. Accordingly, the sectors' shares in the total loan correlate with the identified priorities. Details are in Supplementary Appendix D.

67. For components C and E, the current average economic costs were computed and compared with the average economic cost for the proposed investment. The analysis concluded that the investments were justified as the current average costs exceeded the average cost of the proposed investments.

68. An overview of the present financial position of various line departments in AJKG indicates some resource gap in the case of nonrevenue departments such as health and education. This gap is normally plugged with income from the AJK Council, share of the federal tax, an income in lieu of aid from the federal Government for deficit budget and net capital receipts/cash resources. The contribution is in line with the government's policy for reducing poverty and providing better health and education facilities to relatively underdeveloped regions of the country. For lack of information, it was not possible to complete a financial evaluation of the components; instead, the cost implication of the Project for the financial position of the Government and AJKG was assessed. The assessment shows that the project financing requirements and incremental recurrent costs can reasonably be accommodated with the existing resources of both the Government and AJKG. The Project addresses the issues of sectoral and institutional sustainability by developing the professional capacity of IAs in planning, design, construction, and commissioning; strengthening sector governance; and instituting various programs and measures to improve the IAs' operating efficiency and financial performance. All IAs, except AJKED, have been implementing externally funded projects and maintaining adequate internal controls. To this end, particular attention will be given to training for the accounting staff of all IAs, particularly AJKED, including in-service training, developing a comprehensive MIS, and improving accounting and audit procedures to ensure adequate internal controls.

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<sup>9</sup> The standard of economic analysis is consistent with that of emergency loans and is an exception for this loan.

## **B. Risks**

69. Major risks associated with the Project include the following:

- (i) the security situation may worsen and delay project implementation;
- (ii) given that this is ADB's first operation in AJK, the Project faces some implementation risk, and the capacity of IAs may not be sufficiently improved to successfully implement the Project; and
- (iii) IAs may not successfully address minor land acquisition and resettlement issues in accordance with the resettlement framework.

70. The return of tension is considered unlikely in the near future. With regard to the implementation risk and capacity of IAs, the Project will engage design and implementation consultants, and NGOs to support the IAs and their respective PIUs. Several IAs do have experience with internationally funded projects. For all subprojects requiring land acquisition or resettlement, LARPs will be prepared and submitted to ADB for approval before any land acquisition or displacement takes place.

## **V. ASSURANCES**

### **A. Specific Assurances**

71. In addition to the standard assurances, the Government and AJKG have given the following assurances, which are incorporated in the legal documents:

- (i) AJKG will continue to accord priority to interventions aimed at poverty reduction and community participation in accordance with the poverty reduction strategy of the Government (Appendix 9).
- (ii) The Government will ensure that adequate budgetary allocations of required counterpart funds are made and released in a timely manner to AJKG, and that these counterpart funds are in addition to AJKG's ongoing development program.
- (iii) AJKG, the PCU, and each IA will ensure that each subproject meets, to the satisfaction of ADB, the selection criteria for the relevant component (Appendixes 3, 4, 5, 6 and 7), and that each subproject is undertaken in accordance with agreed-upon procurement procedures, design standards, and implementation arrangements.
- (iv) AJKG will ensure that the preparation and implementation of each subproject will incorporate the gender strategy (Appendix 9).
- (v) AJKG will ensure that civil works contracts for the selected roads include provision for 5-year maintenance to be funded from counterpart resources.
- (vi) AJKG will ensure that all project activities will be carried out in accordance with the applicable environmental laws and regulations of AJKG as well as ADB's *Environment Policy* (2002). AJKG will further ensure that
  - (a) environmental assessments will be undertaken and IEE reports, including an EMP and budget for all subprojects, will be prepared with adequate public consultation in accordance with the applicable laws and regulations of AJKG, ADB's *Environment Policy* (2002), and the EARPF (Appendix 10);

- (b) the Project does not include any subprojects that are classified as category A or sensitive B in accordance with ADB's *Environment Policy* (2002) and does not include any facilities and plots of land in, or within 500 meters of, national parks, sanctuaries, or any other environmentally sensitive areas;
  - (c) all environmental clearances required by any laws, acts, and regulations at national and local levels specified in the EARPF are obtained in a timely manner and before commencing construction on the relevant subproject;
  - (d) all mitigating measures identified in the IEEs, the summary IEEs, and EMPs prepared for the subprojects are incorporated in the subprojects' designs, and are carried out during construction, O&M in consultation with stakeholders, and if there are any significant changes in specific locations or alignments of infrastructure or project facilities after the IEE, additional environmental assessment will be done and a process similar to the IEE, acceptable to ADB, will be undertaken;
  - (e) IEEs for all subprojects will be approved by the AJKEPA, and IEEs for subprojects over \$1,500,000 will be submitted to ADB for approval;
  - (f) the environmental assessment, management, and monitoring capability of AJKEPA, DOH, Education Department, PWD, and AJKED will be strengthened through provision of equipment, facilities, training, and services; and
  - (g) adequate budgetary provisions will be made to ensure effective implementation of all environmental mitigation and monitoring requirements, and the Borrower will design and conduct appropriate training programs for the environment and social specialist staff on topics related to their areas of responsibility.
- (vii) AJKG will ensure, to the extent possible, that subprojects will not require land acquisition or involuntary resettlement. If land acquisition and/or involuntary resettlement are required for any subproject, then AJKG will ensure that
- (a) the relevant IA will prepare a LARP for that subproject, acceptable to ADB, in accordance with the applicable laws and regulations of AJKG, ADB's *Policy on Involuntary Resettlement* (1995), and the RFPG (Appendix 11), and submit it to ADB for review and approval before any land acquisition is initiated;
  - (b) all land, rights-of-way, and other land-related rights required for the subproject are acquired or otherwise made available to the concerned IA before the approval of any relevant contract, and that resettlement for the subproject is implemented in accordance with the approved LARP;
  - (c) ADB's *Policy on Involuntary Resettlement* (1995) will prevail in case of any difference between such policy and AJKG's laws and regulations; and
  - (d) the RFPG and all approved LARPs are circulated to all affected towns and villages.
- (viii) AJKG will ensure that if any indigenous peoples are found in the project areas, appropriate indigenous peoples plans will be formulated in accordance with ADB's *Policy on Indigenous Peoples* and submitted to ADB for review and approval prior to the commencement of any subproject in the area.

- (ix) The Government and AJKG acknowledge that ADB, consistent with its commitment to good governance, accountability and transparency, reserves the right to conduct audits (including procurement audits) of any possible financial or management impropriety in the conduct of the Project. The Borrower, AJKG, and each agency of AJKG will cooperate fully with any such audit and will extend all necessary assistance, including access to relevant books, records, and personnel.
- (x) AJKG, with the help of institutional capacity-building specialists for each component, will identify key areas of institutional capacity building and policy reforms, and in consultation with ADB will prepare a plan for taking action on the key reforms during project implementation. Implementation of the remaining reforms will be undertaken under the follow-on projects, if agreed.
- (xi) AJKG will ensure that the facilities provided under the Project are operated and maintained appropriately, and that adequate budgetary and other resources will be provided for O&M.
- (xii) AJKG will ensure that staff, consultants, materials, vehicles, equipment, and other items required for project implementation will be given reasonable access to the project area, and will take all measures necessary to ensure the safety of all project personnel, including consultants and contractors, during project implementation.

## **B. Conditions for Loan Effectiveness**

72. The following are the conditions for loan effectiveness:

- (i) The Project will have been approved by the Executive Committee of the National Economic Council of Pakistan; and
- (ii) All PIUs will have been established and provided with core staff to the satisfaction of ADB.

## **C. Conditions for Disbursement**

73. No withdrawals will be made until (i) qualified account staff at PCU and PIUs, acceptable to ADB, have been appointed by P&D; and (ii) internal control by PCU and PIUs, acceptable to ADB, have been established.

## **VI. RECOMMENDATION**

74. I am satisfied that the proposed loan would comply with the Articles of Agreement of the Asian Development Bank (ADB) and recommend that the Board approve the loan in various currencies equivalent to Special Drawing Rights 38,031,000 to the Islamic Republic of Pakistan for the Multisector Rehabilitation and Improvement Project for Azad Jammu and Kashmir from ADB's Special Funds resources with an interest charge at the rate of 1.0% per annum during the grace period and 1.5% per annum thereafter; a term of 32 years, including a grace period of 8 years; and such other terms and conditions as are substantially in accordance with those set forth in the draft Loan and Project Agreements presented to the Board.

Tadao Chino  
President

26 November 2004

## PROJECT FRAMEWORK

Design Summary	Performance Indicators/Targets	Monitoring Mechanisms	Assumption and Risks
<p><b>Goal</b> Increased household income and well being, particularly of poor communities, in the project areas</p>	<ul style="list-style-type: none"> <li>• Percentage of the population in absolute poverty reduced from the existing 35% to 22% by 2009</li> <li>• Per capita income trend improved in the project areas</li> </ul>	<ul style="list-style-type: none"> <li>• Annual report of economic survey, Government of Pakistan</li> <li>• Annual Pakistan Resident Mission (PRM) report on Pakistan economic update</li> </ul>	
<p><b>Purpose</b> Improve living conditions, quality of life, and economic prospects of 3.4 million people in all seven districts of Azad Jammu and Kashmir (AJK)</p>	<ul style="list-style-type: none"> <li>• Improved access to economic and social services</li> <li>• By 2009 maternal deaths in project districts reduced by 30% and infant mortality rate by 20% from 2004 levels</li> <li>• Death rate in emergency and accident departments of district hospitals reduced from the current 15% to 10% by 2009</li> <li>• Health services improved with better treatment of more than 75,000 annually admitted patients in district hospitals and utilization of target health facilities increased by 50%</li> <li>• Quality of education system improved with over 15,000 students in rural areas provided primary school buildings, more than 25,000 student in 56 middle and 56 high schools provided rehabilitated buildings, and drinking water and sanitation facilities in all schools in AJK ensured</li> <li>• Safe and reliable drinking water provided for at least 450,000 people in seven districts</li> <li>• Transport services improved with at least 30% reduction in travel time</li> <li>• Improved reliability of existing power distribution system improved with reduction in system losses from 37% to less than 30%</li> <li>• All actions undertaken on capacity building for IAs proposed under each Project component</li> </ul>	<ul style="list-style-type: none"> <li>• Hospital reports</li> <li>• Health management information system</li> <li>• Education management information system</li> <li>• Public Works Department (PWD) management information system</li> <li>• Review missions</li> <li>• Project completion report</li> <li>• Project performance management system (PPMS) surveys</li> </ul>	<p>(R) Political and security situation may deteriorate and delay project implementation.</p> <p>(A) Current satisfactory progress on security and the resulting enhanced economic and social activities indicate that political tension is unlikely to return in the near future.</p>
<p><b>Outputs/Activities</b></p> <p>1. Health Services rehabilitated and improved</p> <p>1.1 Establishment and staffing of project implementation unit (PIU)</p> <p>1.2 Detailed needs assessment</p>	<ul style="list-style-type: none"> <li>• Eight district headquarter hospitals will have rehabilitated and fully equipped and staffed emergency and accident departments, and essential equipment in pediatric and</li> </ul>	<ul style="list-style-type: none"> <li>• Hospital reports</li> <li>• Health management information system (MIS)</li> <li>• Education management</li> </ul>	<p>(R) capacity of implementing agencies (IAs) may not be built to successfully implement the</p>

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Design Summary	Performance Indicators/Targets	Monitoring Mechanisms	Assumption and Risks
<p>survey for the equipment to be procured</p> <p>1.3 Field survey, design and preparation of tender documents for the civil works</p> <p>1.4 Contract award and construction supervision of subprojects</p> <p>1.5 Recruitment of additional Department of Health (DOH) staff and training</p> <p>1.6 Establishment of management information system for improved monitoring and evaluation</p> <p>2. Education services rehabilitated and improved</p> <p>2.1 Establishment and staffing of PIU</p> <p>2.2 Field surveys to assess the scope of civil works in primary, middle and high schools, and evaluation as per selection criteria</p> <p>2.3 Design and preparation of tender documents for the civil works including water supply and sanitation for all schools</p> <p>2.4 Contract award and construction supervision</p> <p>2.5 Recruitment of additional teachers and their training</p> <p>2.6 Establishment of management information system (MIS) for improved monitoring and evaluation</p> <p>3. Water supply system rehabilitated and improved</p> <p>3.1 Establishment and staffing of PIU</p> <p>3.2 Field surveys to assess the scope of civil and mechanical works including the status of water quality</p> <p>3.3 Design and preparation of tender documents for civil and mechanical works</p> <p>3.4 Contract award and construction supervision</p> <p>3.5 Recruitment of additional staff for PWD/PHED and training</p> <p>3.6 Water quality monitoring and rectification</p> <p>3.7 Updating consumer data base through consumer survey, and undertaking actions for improved institutional and financial management</p>	<p>gynecology departments</p> <ul style="list-style-type: none"> <li>• Four damaged tehsils (subdistricts) will have rehabilitated, well equipped, and fully staffed hospitals</li> <li>• Gynecological and pediatrics units in 8 district and 4 tehsil hospitals extended and provided with essential equipment</li> <li>• One lady gynecologist is assigned to each tehsil hospitals</li> <li>• All doctors, paramedical staff, and nurses in 8 district and 4 tehsil hospitals fully trained</li> </ul> <ul style="list-style-type: none"> <li>• About 30 damaged primary schools and 7 damaged middle schools rehabilitated/ reconstructed</li> <li>• About 56 middle schools, and 56 high schools repaired/renovated</li> <li>• Water and sanitation facilities provided to all the schools in AJK, where such facilities are inadequate</li> <li>• About 6000 teachers in all the above schools fully trained</li> <li>• MIS is developed in Education Department</li> <li>• About 30 SMCs strengthened and trained</li> </ul> <ul style="list-style-type: none"> <li>• All seven districts and four tehsils will have rehabilitated and extended water supply distribution network and refurbished water treatment plants</li> <li>• Public Health Engineering Department's (PHED's) capacity built and staff fully trained for sustained operations</li> </ul>	<p>information system</p> <ul style="list-style-type: none"> <li>• PWD management information system</li> <li>• Review missions</li> <li>• Quarterly progress reports</li> <li>• Project completion report</li> <li>• PPMS surveys</li> </ul>	<p>Project.</p> <p>(A) Design and implementation consultants, and non-government organizations (NGOs) will be engaged to support each IA and its PIU.</p> <p>(R) Domestic contractors may delay Project implementation due to difficult mountainous terrain and lack of adequate planning.</p> <p>(A) Due diligence will be applied during prequalification of contractors, and management consultants will exercise maximum professional skills to assist and supervise the contractors work.</p> <p>(R) IAs may not successfully address minor land acquisition and resettlement issues in accordance with the resettlement framework.</p> <p>(A) For all subprojects requiring land acquisition or resettlement, land acquisition and resettlement plans will be prepared and submitted to the Asian Development Bank for approval</p>

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<b>Design Summary</b>	<b>Performance Indicators/Targets</b>	<b>Monitoring Mechanisms</b>	<b>Assumption and Risks</b>
<p>4. Roads and bridges rehabilitated</p> <p>4.1 Establishment and staffing of PIU</p> <p>4.2 Field surveys, preparation of feasibility and detailed designs and contract documents, bid evaluation, contract award and construction supervision</p> <p>4.3 Preparation and implementation of detailed policy reforms for institutional development, and training of PWD staff</p> <p>5. Power distribution network rehabilitated and improved</p> <p>5.1 Establishment and staffing of PIU</p> <p>5.2 Field surveys, preparation of detailed designs and contract documents, bid evaluation, contract award and construction supervision</p>	<ul style="list-style-type: none"> <li>• A minimum of 130 kilometers (km) of the primary road network rehabilitated</li> <li>• A minimum of 650 meters (m) of major bridges on the primary roads constructed/replaced</li> <li>• About 1,050 m of suspension bridges for jeeps constructed on secondary/tertiary roads</li> <li>• About 1,050 m of suspension footbridges constructed</li> <li>• Roadside passenger waiting areas, and benches and toilets for women built on all the roads rehabilitated under the Project</li> <li>• PWD will have their capacity built and staff fully trained</li> <li>• About 750 km of 11 kV lines and 900 km of 0.4 kV lines rehabilitated and augmented</li> <li>• Replacement and addition of inefficient 11kV/0.4kV transformers and rehabilitation and augmentation of service connections undertaken</li> <li>• Necessary equipment and tools for adequate operations and maintenance in Electricity Department will have procured and used</li> <li>• Gender disaggregated database developed in the monitoring and evaluation system of each PIU and impact of the Project on women monitored.</li> </ul>		<p>before any land acquisition or displacement takes place.</p>
<p><b>Inputs</b></p> <p>Infrastructure for</p> <ul style="list-style-type: none"> <li>• Health</li> <li>• Education</li> <li>• Water Supply</li> <li>• Roads and Bridges</li> <li>• Power Distribution Network</li> <li>• Consulting services</li> <li>• PIU recurrent cost</li> <li>• ADB loan</li> <li>• Government financing</li> <li>• Project steering committee meetings</li> <li>• ADB Review Missions</li> </ul>	<ul style="list-style-type: none"> <li>• \$10.4 million</li> <li>• \$5.2 million</li> <li>• \$8.6 million</li> <li>• \$24.2 million</li> <li>• \$18.1 million</li> <li>• \$4.3 million</li> <li>• \$3.8 million</li> <li>• \$57 million</li> <li>• \$19 million</li> <li>• Conducted quarterly</li> <li>• Conducted semiannually</li> </ul>	<ul style="list-style-type: none"> <li>• Progress reports</li> <li>• Signed loan agreement</li> <li>• Annual financial statement</li> <li>• ADB loan ledgers</li> <li>• Minutes of meetings</li> <li>• Mission reports</li> </ul>	<p>(A) ADB loan will be effective.</p> <p>(A) Counterpart funds will be released on time</p>

## EXTERNAL ASSISTANCE

Project Name	Agency	Amount (\$ million)	Date Approved	
<b>Ongoing</b>				
1	Integrated Rural Water Supply	UNICEF	0.334	2001
2	Primary Education for Girls	WFP	1.315	2001
3	Community Infrastructure Services Project	IBRD	20.000	9-Jul-02
4	Protected Area Management (Machiara Park)	IBRD	3.271	24-Apr-01
5	AJK Community Development Project	IFAD/WFP <sup>a</sup>	24.202	9-Jul-02
<b>Total Ongoing</b>			<b>49.122</b>	
<b>Completed</b>				
1	Area Development Project North AJK	UNDP	33.941	1993
2	Area Development Project South AJK	UNDP	16.451	1993
3	Rural Water Supply and Sanitation Project	IBRD	136.70	23-Apr-91
4	Rural Development Works	WFP	8.966	1992
5	Integrated Rural Water Supply	UNICEF	72.982	1990
6	Bhimber Upland Rehabilitation Project	IBRD	9.761	1993
7	Hill Farming	IBRD	21.000	17-Apr-84
8	Northern Resource Management Project	IBRD	28.800	15-Jun-93
9	Neelum Valley Hydro Electric Project	French/Nordic Bank	64.844	1994
10	Northern Health Project	IBRD	12.245	13-Jun-96
11	Flood Damage Restoration Project	IBRD	21.130	4-Mar-93
12	Northern Education Project	IBRD	12.325	30-Oct-97
<b>Total Completed</b>			<b>439.145</b>	
<b>Total Foreign Assistance</b>			<b>488.267</b>	

IBRD = International Bank for Reconstruction and Development, IFAD = International Fund for Agriculture Development, UNDP = United Nations Development Programme, UNICEF = United Nations International Children's Emergency Fund, WFP = World Food Program.

<sup>a</sup> Includes \$2.5 million grant component of WFP.

## COMPONENT A: REHABILITATION AND IMPROVEMENT OF HEALTH SERVICES

### A. Rationale and Concept

1. Azad Jammu and Kashmir (AJK) has a reasonable network of primary health care services besides adequate support for referral hospitals. For a population of about 3.4 million, there are 7 district hospitals, 6 tehsil (subdistrict) hospitals, 31 rural health centers, 184 basic health units, and 105 dispensaries. For all health facilities, there are 1,572 beds, with bed-to-population ratio of 1:2,195, doctor-to-population ratio of 1:6,035 and nurse-to-population ratio of 1:15,207. Health services are free for all in AJK and financed by the state, with the private sector providing for only 12.5% of the population. About 7.5% of the total government expenditure is spent on health (PRs720 million), out of which 80% is recurring expenditure and 20% development expenditure. The annual per capita government expenditure on health is \$4, which is much below international averages of \$12 and \$75 for developing and developed countries, respectively.

2. District and subdistrict facilities in AJK are equipped to provide a range of primary health care services in the absence of well-functioning community-level services. These base hospitals provide treatment for basic conditions such as fever, cough, cold, and diarrhea as well as vaccination services; emergency treatment of injured persons, burn victims; and comprehensive emergency obstetric care. They provide all these services to every individual residing in this territory where 87% of the population is rural. Each of those hospitals has considerable coverage of rural and poor communities spread over the mountainous terrain of AJK. For this reason, the government of AJK plans to strengthen first these base hospitals then the basic health units.

3. None of the district hospitals have a proper accident and emergency department to efficiently deal with emergencies. Important departments like pediatrics, cardiac and operation theaters lack essential equipment. Accommodations for doctors, paramedics, and nurses are limited in most hospitals. The situation in tehsil hospitals is even worse, particularly in Athmuqam, Burnala, Fatehpur, and Kahuta where many hospitals have been partly or completely damaged. The tehsil hospital at Athmuqam, which is completely damaged, has been nonfunctional for several years. Due to lack of access to proper health services, every year a large number of people die in these areas. The most vulnerable groups like women and children have been badly affected. The major problems and weaknesses of tehsil headquarters (THQ) hospitals include limited indoor facilities; absent or nonfunctioning operation theaters, lack of diagnostic services like an X-ray machine and laboratory facilities, absence of proper buildings for an outpatient department and administrative staff; shortage of doctors, nurses, and paramedics due to lack of accommodations and no incentive package to work in remote and war-torn areas.

4. On the average, 75,000 patients are admitted in district hospitals every year, 32,000 of them for some form of emergency. Every year about 4,000 people die in emergencies and a greater number suffer from some kind of disability due to the limited capacity of accident and emergency departments. Furthermore, out of the annually reported 500 seriously burned cases, more than 50% die for lack of life-saving equipment. Many lives can be saved and disabilities prevented, if the accident and emergency departments are rehabilitated, emergency transportation system is improved with adequate ambulances, adequate number of doctors and paramedical staff are recruited and trained, and essential life-saving equipment is available and functioning. For this purpose, AJKG has prioritized for urgent external financing the rehabilitation of accident and emergency departments, and replacement of some outdated and unserviceable equipment in all district headquarter (DHQ) hospitals, and rehabilitation of four

seriously damaged tehil hospitals. To attract doctors to work in remote THQ hospitals, AJKG recently decided to provide an incentive package of PRs25,000 per month and also lift the restrictions for non-AJK doctors to work in these areas. Added with the accommodation facilities to be provided under the Project, the Department of Health (DOH) expects to depute an adequate number of doctors in THQ hospitals.

5. About 60% of the recurring budget (PRs560 million) is spent mainly on staff salaries and the remainder for operational costs. The annual operational budget for district hospitals ranges between PRs19 million and PRs45 million; for tehil hospitals, the average budget is PRs3 million. Of that amount, 40% is used mainly for essential supplies, medicine, utilities, fuel, diet, and repairs, and is generally inadequate to meet actual requirements, hence the chronic shortage of medicine and nonfunctioning of equipment. There is no clear policy for equitable and rational distribution and availability of medicine. As such, the hospitals are unable to provide free medicine, as per AJKG's policy. A district hospital generates on average PRs0.8 million from medical fees (PRs2.0 per visit), which is deposited in the government exchequer. There are no other sources of revenue for hospitals except for informal private donations and contribution from the government's charity fund from which PRs10 million per year is provided.

6. Management is generally centralized, and the medical superintendent and his deputy appointed by the government are responsible for day-to-day management, procurement, and accounting of funds, in line with the government's policy and approved budget. The accounts are annually audited by the auditor general's office. Private contributions and charity funds are managed by the group of syndicates comprising members from the professional doctors community, civil society, and the private sector.

7. Considering the above problems, a two-pronged approach is needed to simultaneously address the issues of (i) providing the most essential equipment and infrastructure that will directly benefit the poor communities and can immediately bring development impacts, and (ii) AJKG to take certain key actions (para. 12) to ensure the sustainability of services.

## **B. Scope**

8. This component will include (i) extension and rehabilitation of accident and emergency departments of eight DHQ<sup>1</sup> hospitals including civil works and provision of needed medical equipment; (ii) rehabilitation of THQ hospitals at Athmuqam, Burnala, Fathehpur, and Kahuta through repair and renovation of existing buildings and rehabilitation/reconstruction of a 30-bed ward with an operation theater and other necessary services; construction of hostels for nurses/other staff and accommodations for doctors; and provision of diagnostic facilities like X-ray machine, laboratory and electrocardiogram machine; (iii) provision of essential equipment to pediatric and gynecology departments at the DHQ and THQ hospitals, focusing on upgrading maternity facilities for enhanced services to vulnerable women and reducing maternal and infant mortality rates; (iv) construction of proper waiting areas and provision of public toilets and clean drinking water for visitors at the above DHQ and THQ hospitals; (v) consultancy assistance for the design and construction supervision of civil works and procurement of equipment, and for enhancing the technical capacity of doctors, nurses, and paramedical staff through training; and (vi) funding of recurrent expenditure of the project implementation unit (PIU) and the salaries of PIU staff and the required additional doctors, nurses, and paramedical staff. Under item (vi) the Project will finance the salaries on a declining basis: 100% in year 1, 75% in year 2, 50% and

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<sup>1</sup> Comprising seven DHQs hospitals and the Abbas Institute in Muzaffarabad District.

25% in years 3 and 4, respectively. AJKG will retain and fully finance staff from its recurring budget onward from year 5 of the Project.

9. Under this component, the capacity of doctors, nurses and paramedics, and DOH staff will be enhanced through training, focusing on management of trauma and emergency critical care. The training will include training for health Managers, district and tesil medical officers, specialists, nurses, and paramedical staff in such areas as handling emergencies, working in operating rooms, intensive therapy unit, and coronary care unit. For this purpose, the quality of all existing in-service training centers in AJK will be improved through provision of teaching aids and equipment, and training of trainers. For timely completion and implementation of training programs, a training consultant will be hired and will assist DOH in assessing training needs and arranging training programs. Capacity building will also include institutionalizing a hospital asset management system.

## **C. Implementation Arrangements**

### **1. Project Execution**

10. DOH will be the implementing agency for this component. A PIU headed by a project implementation officer and with adequate staff will be established by DOH to oversee implementation. The PIU will be responsible for overall management of activities for the health component, including procurement of civil works and equipment, coordination with other relevant departments and line agencies, progress monitoring, audit of accounts and financial statements, and preparation of progress reports.

### **2. Consulting Services**

11. Consulting services will be required to assist DOH in implementing the health component. Consulting services will involve (i) preparation of a layout for an accident and emergency department, its detailed engineering, bid preparation, assistance in procurement and construction, supervision/contract administration for civil works, and procurement of equipment, (ii) detailed assessment of equipment needs in consultation with the administration of hospitals and involving specialist consultants; (iii) project management, monitoring, and reporting; (iv) establishment of hospital asset management; (v) capacity building for DOH and training for doctors, nurses, and paramedical staff; and (vi) developing a proposal for decentralized and autonomous management of hospitals to become partially self-sustainable. An estimated 87 person-months of domestic consulting services will be required. The outline terms of reference are in Supplementary Appendix A.

### **3. Assurances**

12. AJKG will ensure that

- (i) the equipment to be procured is compatible with existing equipment, uses appropriate technology, and can be supported with existing operation and maintenance resources;
- (ii) ambulance and other mobile equipment, will remain in the service for which they are intended;

- (iii) no new land will be acquired and all land needed for construction of additional facilities is already available and is in the possession of the government;
- (iv) the declared incentive package in the form of additional allowance for doctors and paramedical staff serving in remote areas will have been approved and enforced before the Project starts;
- (v) all the equipment can be operated soon after procurement and training, all vacant posts in the tesil and district hospitals under component A are filled before the project activities start in those hospitals, and paramedical staff are provided opportunities to work in remote areas;
- (vi) a new policy on distribution of medicine is introduced, which ensures provision to all in-house patients and sets a limit depending on the financial means of the government on medicine provided free to outpatients;
- (vii) the recurring and operational budgets for the district and tesil hospitals under component A are progressively increased in line with staff requirements and operational expenses;
- (viii) positions provided in Supplementary Appendix E are created before 1 January 2005 and progressively filled at least 1 month before the completion of the facilities;
- (ix) for the equipment to be procured under component A, operators and technicians are assigned, or post created and filled at the time of placing the order for that equipment;
- (x) following the training needs assessment, the designated person is trained, at least 1 month before the completion of the facility; and
- (xi) the cabinet committee of AJK will consider recommendations of the management consultant on possible options to devolve powers and responsibilities to local hospitals, including recommendations for making these hospitals more autonomous in management, control of resources planning, expenditure, and revenue generation. As a first step in this direction, the government will allow the district and tesil hospitals to retain before 1 January 2005, the revenue they currently generate from medical fees, which would be managed by the hospital syndicates.

## COMPONENT B: REHABILITATION AND IMPROVEMENT OF EDUCATION SERVICES

### A. Objective and Scope

1. This component will rehabilitate facilities and provide other support required immediately to restore and improve education services, including (i) rehabilitation/reconstruction of 30 damaged primary schools and 7 damaged middle school buildings; (ii) repair and improvement of about 56 middle schools and 56 high schools as per agreed-upon criteria; (iii) provision of water and sanitation facilities to all schools where such facilities are inadequate; (iv) consultancy assistance to the education department to build capacity by training the teaching staff including in-service training of follow-up learning material, developing a comprehensive management information system (MIS), improving management and planning capacity of the education department, and design and construction of civil works; (v) strengthening of school management committees (SMCs) through community mobilization and training; and (vi) funding of recurrent expenditure of the PIU and salaries of the PIU staff. Under item (vi), the Project will finance the salaries of PIU staff on a declining basis: 100% during year 1, 75% in year 2, 50% in year 3, and 25% in year 4.

2. As a matter of priority, all schools in the project area will be provided latrines and connections for safe drinking water. Health and hygiene education will be promoted. The Project will monitor the effects of improvements in water quality on health, especially on child stunting, by organizing a representative sample study and project performance management system (PPMS).

### B. Selection Criteria

3. The selection criteria applied to qualify primary and middle schools for construction of buildings are minimum enrollment and maximum teacher-student ratio; reasonable proximity to other schools; voluntary contribution of land and willingness of local communities to participate in and contribute to building, maintaining, and managing the schools. The key principle is to provide infrastructure as an incentive for encouraging enrollment and improving student-teacher ratio, but at the same time ensuring community ownership, and sustainability and viability of facilities provided. In addition to the general selection criteria for subproject selection, the following criteria will be applied for construction of buildings for primary schools:

- (i) the enrollment is at least 25 students and the maximum teacher-to-student ratio is 1:40;
- (ii) the selected school is not currently included in any other project for the same activities;
- (iii) distance between the selected schools is at least 1.5 kilometers (km); and
- (iv) based on the enrollment, single-teacher primary schools will be provided a standard two-room building; and primary schools, with two teachers or more, will be provided a standard three-room building.

4. For middle schools, repair and improvement will be provided to schools that meet the following criteria

- (i) the enrollment is at least 100 students and the minimum number of trained teachers is 8. In case of enrollment above 200, a maximum teacher-to-student ratio is 1:25;
- (ii) the land required to accommodate additional facilities is already in the possession of the respective school authorities;

- (iii) the selected school is not currently included in any other project for the same activities; and
- (iv) there are at least four feeder schools within a 2-km radius of the middle school.

### **C. Implementation Arrangements**

5. The Department of Education (DOE) of AJKG will be the implementing agency (IA) for this component. A PIU headed by a project implementation officer and with adequate staff will be established by DOE to manage activities including procurement of civil works, coordination with other relevant departments and line agencies, progress monitoring, audit of accounts and financial statements, and preparation of progress reports. Procurement of civil works, goods, and services will be in accordance with the procedures agreed-upon in the loan agreement and in the light of the guidelines of the Asian Development Bank (ADB). All civil works contracts will be prepared by DOE based on standard layouts that will be validated and reviewed by the design consultants. Similarly, specifications for school furniture and laboratory equipment will be prepared using DOE standards, reviewed by the consultants, and approved by ADB.

6. Construction of buildings for primary schools may be undertaken by the respective SMC/CO of each village. The SMCs will be registered organizations and will sign a formal memorandum of understanding with DOE to undertake their obligations. Each SMC (independent or as part of CO) will comprise a chairman selected by the community, with schoolteachers, and at least three parents of the students as members. SMCs/COs will be formed, mobilized, and trained under the Project through community mobilizers/non-government organizations.

### **D. Consulting Services**

7. About 71 person-months of consulting services will be required to help DOE implement the education component. Consulting services will provide (i) project management and implementation support to DOE for planning, identification of target schools, detailed engineering design, bid preparation, and construction supervision for the rehabilitation, reconstruction, and improvements of selected primary, middle and high schools; and (ii) assistance in procuring equipment; overall project and education planning, policy review, management (including MIS), monitoring and reporting, and coordinating the capacity building program for teachers.

8. DOE will also require the services of an NGO/consulting firm for formation (where required), and mobilization and capacity building for SMCs. The services will cover (i) mobilization of SMCs for participation in and contribution to primary school construction; (ii) identifying training needs of SMCs for effective school management; and (iii) building the capacity of SMCs in identified needs including bookkeeping, and education management practices and related qualitative measures (monitoring, etc.); (iv) guidance to SMCs in procuring material for school construction, mobilizing savings for O&M of schools, and registration or integration of SMC with existing registered COs. Outline terms of references for the consulting services and NGO services are in Supplementary Appendix A.

### **E. Special Consideration**

9. The current design standards in constructing primary and middle schools require about 2.3 cubic meters of wood for a single-room school. To curtail environmental damage and unnecessary use of wood, the standards will be revised to eliminate or minimize the use of wood, except where necessary, such as in remote inaccessible areas.

10. Teachers' training introducing modern teaching techniques and basic subjects will be conducted by the existing Education Extension Department (EED) based on already developed modules and training material, and will be a one-time activity conducted at the local level. The Project will also provide an incentive package, which will be agreed-upon with ADB during inception, providing quality-based bonus to primary teachers recommended by SMC on the basis of their performance and application of training received from EED.

#### **F. Risks**

11. The success of the Project depends on (i) strict compliance with the agreed-upon selection criteria, (ii) capacity of DOE to successfully implement the Project, (iii) availability of the minimum number of required teachers in schools, and (iv) sustained provision of the required O&M funds. With regard to the first two risks, the Project will engage design and implementation consultants, NGO, and SMCs to support DOE and its PIU. ADB will independently monitor selected samples using an advisory technical assistance and through review missions and consultants' reports. On the last two risks a high-level understanding was reached with AJKG and safeguards were built into the project covenants, supported by policy reviews as part of project implementation.

#### **G. Covenants and Assurances**

12. AJKG has given the following assurances, which are incorporated in the legal documents:

- (i) All positions required to meet the staffing requirement of trained teacher-student ratio of 1:40 and 1:25 at primary and middle levels, respectively, will be filled through redeployment and/or by creating these posts in the recurring budget before the start of any subproject.
- (ii) No new land will be acquired. All land required for construction of additional facilities is already available and is in the possession of AJKG or have been voluntarily donated by community.
- (iii) The recurring and operational budget for all middle schools will be provided at rationalized incentive- and performance-based criteria mutually agreed-upon with ADB (Supplementary Appendix E). The recurring budget for O&M will be progressively increased to 15% of the overall recurring budget, starting from 1 July 2005 at an annual rate of 3% per year.

## **COMPONENT C: REHABILITATION AND IMPROVEMENT OF WATER SUPPLY SYSTEMS**

### **A. Rationale**

1. Limited piped water is available in all major towns in Azad Jammu and Kashmir (AJK). In many urban schemes, the existing water networks and water treatment plants are dilapidated and water quality does not meet the prescribed World Health Organization standards. A recent survey of the hospitals carried out during the Mission indicates that typhoid, hepatitis, cholera, and other gastrointestinal water-related diseases have reached an alarming level and hospitals are continuously registering an increase in patients. The government of AJK (AJKG) continues to spend funds from its annual development program (ADP) to improve water supply services, but those funds are inadequate to completely address the issues. Despite the adequate and abundant water throughout the year in streams and river tributaries, AJK has consistently lagged behind in efficient utilization of these natural resources. The residents of unserved settlements have to rely often on unsafe sources such as rivers, open wells, and natural streams. Contamination of water sources, intermittent supply, intermixing of sewerage and water pipelines due to inadequate spacing and faulty joints and old leaking pipes are major issues that require urgent attention. Service levels in the sanitation sector are also low. Only a poor form of a proper sewerage system is present in a few urban setups, except Muzaffarabad. Drainage systems in towns depend on open canals that serve as both drainage and sewage collection points. Wastewater is disposed of without any proper treatment and causes water quality of rivers and streams to deteriorate. Surveillance and control of water quality are a major issue. The Public Health Engineering Department (PHED) laboratory stationed at Muzaffarabad has been in operation since 1997 and is properly equipped for analysis of major drinking water parameters except a few. However, the present staff lacks capacity and proper skills to produce reliable results. Immediate attention is required to improve water supply, water quality, and sanitation systems in a planned and systematic manner.

2. An overview of the existing water supply situation in each district is in Supplementary Appendix G.

### **B. Objectives and Scope**

3. This component will improve living conditions and the quality of life in urban communities where water is scarce and unsafe for human consumption. Component C will include (i) rehabilitation and extension of the existing water supply networks and treatment plants in all seven district headquarter (DHQ) towns and four selected tehsil headquarter (THQ) towns; and (ii) consultancy assistance to build the capacity of the PHED by providing technical and financial management training for organizing and efficiently managing water supply functions in a sustained and cost-effective manner, as well as for design and construction supervision of civil and mechanical works; and (iii) funding of recurrent expenditure of the PIU and salaries of the PIU staff and the required additional staff of the IA. Under item (iii), the Project will finance the salaries of staff on a declining basis: 100% during year 1, 75% in year 2, 50% in year 3, and 25% in year 4. AJKG plans to undertake sanitation works through its ADP.

4. Planned interventions for institutional strengthening include (i) training in technical and financial management for PHED staff, including mapping and asset management; (ii) increasing public awareness of urban issues, water quality, sustainability of facilities, and options for improving the delivery of urban services; (iii) improving municipal financial management by introducing improved accounting procedures and management information systems that include

budgeting, resource mobilization, enhanced O&M of assets, and improved billing, revenue collection, and reporting systems; (iv) undertake a detailed study of tariff setting and demand analysis,<sup>1</sup> and (v) establishing regulatory systems to ensure that laws, standards, rules, and regulations are equitably and consistently applied. These are critical to long-term sustainability of urban centers. Where possible, technical training will be hands-on and linked to measurable outputs, to enable determination of whether required skill levels have been achieved, and to verify that the training is actually used on the job. The design and implementation of measures for institutional strengthening will be coordinated with training programs provided in other ongoing programs. This component will set up a separate assets management section, which will maintain, update, and record all assets.

## **C. Implementation Arrangements**

### **1. Project Execution**

5. The Planning and Development Department of AJKG will take overall responsibility for project management and execution through a project coordination unit (PCU). The Public Works Department (PWD) will implement this component by establishing a PIU within its Public Health Engineering (PHE) Section. The PIU, headed by the project director, supported by a team of professionals from PHE and a team of consultants, will be responsible for overall coordination, planning, implementation, and management of project activities.

### **2. Consulting Services**

6. Consulting services will be required to assist PWD/PHE in implementation. The consulting services will involve (i) detailed investigations for the scope of rehabilitation of the existing system; (ii) review/preparation of the water supply master plans; (iii) engineering design of the infrastructure (water distribution and treatment plant) to be rehabilitated, bid preparation, assistance in procurement and construction supervision/contract administration for civil works and procurement of equipments; (iv) project management, monitoring, and reporting; (v) establishment of asset management and water quality monitoring programs; (vi) capacity building for PWD/PHE and training for district and subdistrict staff for efficient O&M, water quality monitoring and rectification, and sound financial management. An estimated 152 person-months of domestic consulting services will be required. The detailed outline terms of reference for consulting services are in Supplementary Appendix A.

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<sup>1</sup> This will be done along the lines described in a technical note given at the ADB web site. [http://www.adb.org/Documents/ERD/Technical\\_Notes/tn010.pdf](http://www.adb.org/Documents/ERD/Technical_Notes/tn010.pdf)

## COMPONENT D: REHABILITATION OF ROADS AND BRIDGES

### A. Background and Rationale

1. Roads are the only means of transportation in Azad Jammu and Kashmir (AJK) and are crucial not only for economic development but also for providing access to health, education, and other social services for the rural population scattered over remote and mountainous terrain. The average investment on roads accounts for over 22% of the public sector development program (PSDP) of the government of AJK (AJKG) during FY1990/91 to FY2002/03, and is about 29% of the PSDP for FY2003/04.

2. The total road network in AJK consists of about 9,430 kilometers (km), of which 4,021 km are paved primary roads that provide links to Pakistan and connect the seven districts. The primary roads are managed by the Public Works Department (PWD), which is also responsible for 419 km of fair-weather<sup>1</sup> roads that provide links to the rural areas. Another 4,990 km of roads are the tertiary links connecting villages to the existing road network. They are developed and managed by the Local Government and Rural Development Department (LGRDD) in partnership with the community-based organizations of the villages. The mountainous terrain and river valleys in AJK require a significantly large number of bridges to provide the desired level of connectivity to the rural areas where about 87% of the AJK population live.

3. Damage in insecure areas and lack of overall maintenance management resulted in severe deterioration of the road network. The situation is exacerbated by poor construction quality<sup>2</sup> and extreme climate conditions resulting in a large backlog of road rehabilitation and reconstruction.

4. Poor maintenance of roads is less of a funding issue and more of an institutional issue. Funds received by PWD during FY1991/92 to FY2002/03 ranged from PRs86 million in FY1991/92 to PRs160 million in FY2001/02. For FY2003/04, PWD has received PRs196 million. Based on the network extension and condition of a few roads, it has been estimated that the maintenance requirements for the primary network will range between PRs150 million to PRs250 million. Hence the allocation of PRs196 million made by AJKG for FY2003/04 is considered adequate. However, the bulk of maintenance is undertaken through force-account procedure that is not effective, as over half of the maintenance resources are consumed by the large number of maintenance personnel whose efficiency levels are extremely low. In addition, lack of data on the road network including periodic condition surveys prevents planned and prioritized maintenance and effective use of the resources.

5. Major institutional reforms are needed in parallel with road network improvements to ensure that PWD evolves into an efficient road agency that can (i) effectively manage its network; (ii) institute cost recovery mechanisms to supplement maintenance resources, (iii) incorporate environmental, social, and safety aspects in developing the network; and (iv) seek public-private partnership to support road development and maintenance.

6. Realizing the need for improved construction quality and timely completion of civil works contracts for roads, PWD has initiated procurement reforms that, among others, include improved bid evaluation procedures and screening out of poor performing contractors. These

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<sup>1</sup> These are unpaved roads, not fully operational during extreme weather conditions.

<sup>2</sup> PWD follows the outdated 1971 Punjab Standard Specifications. However, visit to ongoing road rehabilitation contracts indicates that even these standards are not fully complied.

are just the first steps, and continuation and introduction of further reforms are needed to achieve the objective of cost-effective, good quality, and timely construction works.

## **B. Objectives and Scope**

7. The objectives of the road component are to (i) contribute to economic development through improved road infrastructure, and (ii) provide rural populations in AJK access to livelihood and social services, thereby reducing poverty. Improvement of primary roads will reduce transportation costs, enhance subregional connectivity, facilitate trade, and promote regional peace and harmony.

8. Accordingly, the road component will cover rehabilitation and improvement of roads providing inter- and intra-district links and improving subregional connectivity, construction of major bridges, suspension bridges for jeeps, and suspension footbridges to provide access to remote areas. Physical improvements will be supplemented by institutional improvements in PWD.

9. This component will comprise (i) rehabilitation and improvement of a minimum of 130 kilometers (km) of the primary road network; (ii) construction/replacement of a minimum of 650 meters (m) of major bridges on the primary roads; (iii) construction of about 1,050 m of suspension bridges for jeeps on secondary/tertiary roads; (iv) construction of about 1,050 m of suspension footbridges to improve connectivity of remote communities; (v) policy reforms, capacity building for PWD, and improvements in civil works procurement procedures; and (vi) funding of recurrent expenditure of the PIU and salaries of the PIU staff. Under item (vi), the Project will finance the salaries of PIU staff on a declining basis: 100% during year 1, 75% in year 2, 50% in year 3, and 25% in year 4.

10. Capacity building for PWD and LGRDD will include (i) institutionalizing a road asset management system, (ii) training in technical aspects, project management, and contract administration; and (iii) introduction of geographic information system. Policy reform initiatives include (i) introducing of cost recovery through user charge or tolls; (ii) creating a dedicated road maintenance fund financed from the Government's annual maintenance allocations and toll revenues; (iii) including environmental, social, and resettlement impacts in planning; (iv) providing road safety in road design and inclusion of road safety audits for each road; (v) gradually deleting force account procedures and introducing maintenance through contracts; and (iv) introducing projects financed through public-private partnership. The Project will support (i) introduction of improved prequalification procedures; (ii) a provision in contracts to enable contractors to procure equipment; (iii) capacity building for contractors' staff in specifications, quality control, bids preparation, etc.; and (iv) introduction of an incentive program for performing contractors.

11. PWD has identified a number of priority road sections for rehabilitation/widening, and priority bridges for construction under the Project. The prioritized list of roads and bridges proposed by PWD and LGRDD is in Supplementary Appendix H. As the proposed roads exceed the financing available under the project, selection criteria (para. 16) are prepared based on the project objectives, field visits to most of the roads and bridges in the list, and discussions with PWD on the ongoing road improvement program. The selection criteria include network needs, technical and economic feasibility, and resettlement, social and environmental impacts. The Project will finance up to approximately 180 km of roads and 800 m of bridges from the list that

meet the selection criteria. The design standards and typical cross-section for road improvements are in Supplementary Appendix H.<sup>3</sup>

12. LGRDD also provided a long list of suspension bridges for jeeps and footbridges for consideration under the Project. With the available financing, about 15 suspension bridges totaling 1,050 m, and about 15 footbridges also totaling 1,050 m will be included. These bridges will be selected from the list prepared by LGRDD in consultation with the project implementation unit (PIU) and approved by the project steering committee.

### **C. Implementation Arrangements**

13. PWD will be the Implementing Agency (IA) for this component. For suspension bridges and footbridges, LGRDD will be the IA. Each PIU at PWD and LGRDD, headed by a project implementation officer and with adequate staff will be established to oversee implementation. The PIU will be responsible for overall management of activities including procurement of civil works, coordination with other relevant departments and line agencies, progress monitoring, audit of accounts and financial statements, and preparation of progress reports. The PIU at LGRDD will be responsible for implementing suspension bridges for jeeps and footbridges.

### **D. Consulting Services**

14. Domestic consulting services of about 364 person-months will be required to assist PWD and LGRDD in implementing the road component. They will involve (i) feasibility studies and assessment of eligibility of the proposed roads and bridges; (ii) detailed engineering, bid preparation, assistance in procurement and construction supervision/contract administration for primary roads, major bridges, suspension bridges for jeeps and footbridges; (iii) project management, monitoring, and reporting; (iv) establishment of road asset management; (v) capacity building of PWD and LGRDD and contractors; and (vi) assistance to PWD and LGRDD in policy and institutional reforms and procurement reforms. The consultants will also assist PWD in monitoring and verifying compliance of resettlement actions and environment mitigation measures. The outline terms of reference for the consultants are in Supplementary Appendix A.

### **E. Road Maintenance**

15. PWD is responsible for maintaining the road network and bridges. Presently the road maintenance work is carried out under force account procedure by the large number of staff on PWD's payroll (para. 4). This is not an efficient system as over half of the annual maintenance funds are consumed in salaries and inadequate resources are left for actual maintenance activities. This issue is being addressed under the policy and institutional reforms subcomponent. To ensure sustainability of the roads improved under the Project, the civil work contracts, wherever possible, will provide for maintenance of roads for an initial period of 5 years. The cost of maintenance will be funded from counterpart resources. Subsequently a more capable PWD would take over the responsibility for road maintenance.

### **F. Selection Criteria for Roads and Bridges**

16. In addition to the general subproject selection criteria noted in the main text of the Report and Recommendation of the President, the selection of the roads and bridges to be

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<sup>3</sup> The initial prioritized list had 21 candidate roads and 12 bridges, but was reduced to 15 short-listed roads and 9 bridges based on field visits and evaluation.

financed under the Project will be subject to Asian Development Bank (ADB) approval, based on the following criteria:

- (i) **Network requirement.** The proposed road or bridge will be part of PWD's/LGRDD's primary road network and AJKG's priority list (Supplementary Appendix G). To meet connectivity needs and focus on the rural areas, urban roads will not be included.
- (ii) **Technical feasibility.** The proposed road or bridge will be technically feasible based surveys and detailed engineering to be undertaken during implementation.
- (iii) **Economic feasibility.** The proposed road or bridge will be economically viable in accordance with ADB's *Guidelines for the Economic Analysis of Project*, and the estimated economic internal rate of return will not be less than 12%. The PIU will include a transport economist (as part of proposed package B of consultants) to undertake respective analysis.
- (iv) **Resettlement and social impact.** The proposed road or bridge should not require any involuntary resettlement or major land acquisition, follow existing alignment, and avoid major impacts on any affected persons. If land acquisition or involuntary resettlement cannot be avoided, a full resettlement plan (for more than 200 affected persons) or short resettlement plan (for fewer than 200 affected persons), will be prepared in accordance with the Resettlement Framework and Procedural Guidelines as agreed-upon by AJKG and ADB and in accordance with ADB's *Guidelines on Involuntary Resettlement*.
- (v) **Environmental considerations.** The proposed road or bridge will not cause any major adverse impact on the environment and include only rehabilitation/upgrading of existing roads. The roads will follow existing alignment (rights-of-way) and do not require cutting of a large number of trees or clearing of forest, and provide adequate drainage. An initial environmental examination will be required to determine its environmental impacts in compliance with the requirements of the Government and ADB and the environmental assessment review procedures framework.<sup>4</sup>

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<sup>4</sup> ADB. 2003. *Environmental Assessment Guidelines of the Asian Development Bank*. Manila.

## **COMPONENT E: REHABILITATION AND IMPROVEMENT OF THE POWER DISTRIBUTION NETWORK**

### **A. Rationale and Concept**

1. The power sector in Azad Jammu and Kashmir (AJK) consists of the Electricity Department (AJKED), the Hydroelectric Board (HEB), and the Inspectorate of Electricity. AJKED is responsible for planning, construction, operation and maintenance (O&M) of the power distribution network in AJK. HEB is in charge of electricity generation from hydropower stations in AJK up to the capacity of 50 megawatts (MW), and the Inspectorate of Electricity assumes the role of sector regulator. Of the current electricity supply requirement of 307 MW in AJK, 270 MW is supplied by the Water and Power Development Authority (WAPDA) of Pakistan through the AJK national grid system comprising nine grid stations of 132 kilovolts (kV) and six grid stations of 33 kV, while HEB supplies about 37 MW. WAPDA is also responsible for construction, O&M of all transmission systems in AJK and plans to expand the capacity to 400 MW for the next 5 years. In remote areas, electricity is also supplied from off-grid systems, but the quantity is negligible. The Inspectorate of Electricity regulates the quality and tariff of electricity supply in AJK, voluntarily following the rules and regulations as well as the tariff settings established by the National Electricity Power Regulatory Authority of Pakistan. This institutional structure is expected to remain unchanged in the foreseeable future.

2. Prior to 1973, electricity supply was available only in a few towns with a network of 295 kilometers (km) of 11 kV lines, 176 km of 0.4 kV lines, and 75 transformers/substations. Since AJKED launched a broad electrification program in 1974 with implementation of the Power Development Scheme in AJK, the electricity supply system has been substantially expanded. The current power distribution network comprises 6,450 km of 11 kV lines, 10,040 km of 0.4 kV lines, and 7,000 transformers/substations, connecting electricity to about 70% of the population and 95% of the villages. However, inadequate O&M for the network due to insufficient investment has led to poor quality of service characterized by high system losses, frequent outages, and significant voltage drops. Inadequate power supply has been a major constraint to economic and social development in AJK where 87% of the population reside in rural areas with an average annual income of about \$200-\$250, half of the average income in Pakistan. The provision of reliable and adequate electricity supply is essential to boost the local economy, and this is a central feature of the government of AJK (AJKG) priorities and development plans. In line with this, the development focus of AJKED is primarily on expansion of electricity supply to the remaining areas and improvement of efficiency in electricity supply. AJKED has prepared and implemented various programs to expand electricity supply to the remaining populations.

3. To improve the efficiency of electricity supply, it is essential to reduce system losses. Although losses have been reduced from 47% over the last 7 years, the current overall loss in the level of 37%,<sup>1</sup> is unacceptably high and not sustainable. High system losses are attributable to (i) insufficient grid stations; (ii) lengthy and overloaded feeders/lines; (iii) damaged/overloaded transformers; (iv) slow, damaged/obsolete meters; (v) poor maintenance facilities; and (vi) inadequate billing systems. To address the items (ii), (iii), (iv) and (v), AJKED engaged a consultant in 1995 to assess the state of various feeders and come up with a plan for rehabilitation and augmentation of the distribution network. Survey and mapping of the existing distribution network have almost been completed, and completion of the engineering and detailed design is expected by December 2004. From this study, AJKED has prepared a plan—

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<sup>1</sup> From data provided by AJKED, technical losses are estimated to range from 20% to 22%, while administrative losses are 15-17%.

Improvement, Renovation, and Augmentation of Power Distribution Network in AJK for which financial assistance is being sought from the Asian Development Bank (ADB). To address item (i), WAPDA has embarked on an augmentation and expansion plan of grid stations in consultation with AJKED. To address item (vi), AJKED has initiated the development of a computerized billing system utilizing its own funds, initially for the area of Muzzafarrabad, the capital city of AJK. If successful, the system will be replicated in the rest of AJK.

4. Investments for construction and O&M of the power distribution network have been made by AJKED with the development budget of AJKG without assistance from external aid agencies. However, AJKED has limited experience in implementing of large projects and has had no experience working with other aid agencies. In view of this, the Project will assist AJKED in developing its professional capacity by providing consulting services in planning, design, construction, commissioning, and testing of power distribution systems.

5. Due to the relatively low tariff levels in AJK, affordability and willingness to pay are satisfactory as may be seen in the high billing/collection ratio of 91.4% in FY2003. Addressing the key issue of high system losses under the Project will improve the financial situation of AJKED, with the possibility of more room for reduction of tariff levels in a longer term.

6. The Project is not listed in the Country Strategy and Program/Updates for Pakistan. However, the project fits in ADB's overall strategy to reduce poverty, promote subregional cooperation among member countries, and help reinforce the current positive environment generated through the Islamabad Declaration. These operations give ADB an excellent opportunity to use its investments in physical and social infrastructure to help reduce poverty in the areas and catalyze the normalization of relations between the two major countries in the region.

## **B. Objectives and Scope**

7. The Project aims to help AJKED implement the urgently needed rehabilitation and improvement of the power distribution network in AJK to reduce system losses and improve reliability of the existing power distribution network through (i) rehabilitation and augmentation of about 750 km of 11 kilovolt (kV) lines; (ii) rehabilitation and augmentation of about 900 km of 0.4 kV lines; (iii) replacement and addition of 11 kV/0.4 kV transformers; (iv) rehabilitation and augmentation of service connections; (v) procurement of necessary equipment and tools for adequate O&M of the power distribution network; (vi) consulting services for implementing this component and capacity building of AJKED; and (vii) funding of recurrent expenditure of the PIU and salaries of the PIU staff and required additional staff of the IA. Under item (vii), the Project will finance the salaries of staff on a declining basis: 100% during year 1, 75% in year 2, 50% in year 3, and 25% in year 4.

8. To strengthen sector efficiency, the Project will help AJKED develop its professional capacity by providing consulting services in planning, design, construction, commissioning, and testing of power distribution systems. In addition, assistance will be provided for strengthening sector governance, enhancing AJKED's financial performance, and instituting various programs and measures to improve AJKED's operating efficiency and performance. To this end, particular attention will be given to (i) improving financial performance and self-financing of AJKED by reduction of system losses, (ii) helping to introduce a computerized billing system, and (iii) improving accounting and audit procedures.

## **C. Implementation Arrangements**

### **1. Project Execution**

9. The Planning and Development Department of AJKG will be responsible for overall execution of the Project through a project coordination unit (PCU). Implementation will be carried out by AJKED through a project implementation unit, headed by a full-time project implementation officer, with a team of professional and support staff. Preparation, implementation, and monitoring of schemes will be the responsibility of AJKED and the PCU. Given the size, complexity, and the fast-track nature of the Project, AJKED's implementation capacity needs to be strengthened with consultancy assistance and installation contractors.

### **2. Selection and Implementation of Schemes**

10. The scope of this component has been based on the assessment of existing distribution lines undertaken by the consultants of AJKED in three of the seven districts. However, AJKED will identify, prioritize, and design the schemes to be covered under the Project with the assistance of the implementation consultants during project implementation. The schemes to be covered will follow the general subproject selection criteria stated in the main text of the Report and Recommendation of the President: technically feasible, the least-cost option, and considering the increase in demand in the future. AJKED will prepare proposals for these schemes in a format agreed-upon with ADB during the project inception period.

## **D. Risks**

11. The success of the Project will depend on (i) expansion and augmentation of the grid station capacity to be undertaken by WAPDA; (ii) AJKED's capacity to successfully implement the Project; and (iii) timely release of counterpart funds by AJKG. To address the first risk, there has been a high-level agreement among AJKG, WAPDA, and the Government of Pakistan. To mitigate the second risk, the Project will finance implementation consultants and installation contractors to be engaged by AJKED. As the last risk, covenants were proposed to ensure the availability of counterpart funds.

## **E. Covenant and Assurances**

12. In addition to the standard covenants, the proposed loan covenants will include the following:

- (i) AJKG will cause AJKED to employ competent and qualified contractors for timely and proper installation of equipment and materials procured.
- (ii) AJKG will ensure that the power distribution systems rehabilitated under the Project are operated and maintained properly, and that adequate budgetary and other resources including human resources will be provided for that purpose.
- (iii) AJKG and AJKED will ensure that all schemes meet, to the satisfaction of ADB, the agreed-upon selection criteria and implementation arrangements.

## DETAILED COST ESTIMATES AND FINANCING PLAN (\$ million)

Item	FX	LC	Total	ADB (ADF)		Government of Pakistan
				FX	LC	LC
<b>A. Rehabilitation and Improvement of Health Services</b>						
1. Civil Works	0.5	1.8	2.3	0.5	0.8	1.0
2. Equipment	6.3	0.3	6.6	6.3	0.3	0.0
3. Consulting Services	0.0	0.4	0.4	0.0	0.4	0.0
4. Project Management/Incremental Exp.	0.0	1.1	1.1	0.0	1.1	0.0
5. Taxes and duties	0.0	0.9	0.9	0.0	0.0	0.9
<b>Base Cost (Subtotal A)</b>	<b>6.8</b>	<b>4.5</b>	<b>11.3</b>	<b>6.8</b>	<b>2.6</b>	<b>1.9</b>
<b>B. Rehabilitation and Improvement of Education Services</b>						
1. Civil Works	0.5	3.3	3.8	0.5	1.4	1.9
2. Equipment	0.5	0.2	0.7	0.5	0.2	0.0
3. Consulting Services	0.0	0.5	0.5	0.0	0.5	0.0
4. Project Management/Incremental Exp.	0.0	0.9	0.9	0.0	0.9	0.0
5. Taxes and duties	0.0	0.4	0.4	0.0	0.0	0.4
<b>Base Cost (Subtotal B)</b>	<b>1.0</b>	<b>5.4</b>	<b>6.3</b>	<b>1.0</b>	<b>3.1</b>	<b>2.3</b>
<b>C. Improvement of Water Supply System</b>						
1. Civil Works	0.2	1.7	1.9	0.2	0.7	1.0
2. Equipment	3.6	1.9	5.5	3.6	1.9	0.0
3. Consulting Services	0	0.6	0.6	0	0.6	0.0
4. Project Management/Incremental Exp.	0	0.3	0.3	0	0.3	0.0
5. Taxes and duties	0	0.7	0.7	0.0	0.0	0.7
<b>Base Cost (Subtotal C)</b>	<b>3.8</b>	<b>5.2</b>	<b>9.0</b>	<b>3.8</b>	<b>3.5</b>	<b>1.7</b>
<b>D. Rehabilitation of Roads and Bridges</b>						
1. Civil Works	5.6	15.1	20.7	5.6	6.6	8.5
2. Equipment	0.1	0.0	0.1	0.0	0.0	0.1
3. Consulting Services	0.0	1.1	1.1	0.0	1.1	0.0
4. Project Management/Incremental Exp.	0.0	0.9	0.9	0.0	0.9	0.0
5. Taxes and duties	0.0	2.1	2.1	0.0	0.0	2.1
<b>Base Cost (Subtotal D)</b>	<b>5.7</b>	<b>19.2</b>	<b>24.9</b>	<b>5.7</b>	<b>8.6</b>	<b>10.7</b>
<b>E. Improvement, Renovation, and Augmentation of Power Distribution Network</b>						
1. Rehabilitation of 11 kV Lines	4.6	0.9	5.5	4.6	0.9	0.0
2. Rehabilitation of 0.4 kV Lines	2.0	0.6	2.6	2.0	0.6	0.0
3. Transformers (11/0.4 kV)	2.4	0.3	2.7	2.4	0.3	0.0
4. Service Connections	3.3	0.4	3.7	3.3	0.4	0.0
5. Maintenance Tools and Equipment	1.0	0.0	1.0	1.0	0.0	0.0
6. Consulting Services	0.0	0.6	0.6	0.0	0.6	0.0
7. Project Management/Incremental Exp.	0.0	0.7	0.7	0.0	0.7	0.0
8. Taxes and duties	0.0	1.6	1.6	0.0	0.0	1.6
<b>Base Cost (Subtotal E)</b>	<b>13.3</b>	<b>5.1</b>	<b>18.4</b>	<b>13.3</b>	<b>3.5</b>	<b>1.5</b>
<b>F. Project Coordination Consultant</b>	<b>0.0</b>	<b>1.1</b>	<b>1.1</b>	<b>0.0</b>	<b>1.1</b>	<b>0.0</b>
<b>Total Baseline Costs</b>	<b>32.1</b>	<b>42.6</b>	<b>74.6</b>	<b>32.1</b>	<b>23.5</b>	<b>19.0</b>
<b>Contingencies</b>						
<b>Physical</b>	<b>1.5</b>	<b>2.0</b>	<b>3.5</b>	<b>1.5</b>	<b>1.1</b>	<b>0.9</b>
<b>Price</b>	<b>0.0</b>	<b>0.2</b>	<b>0.2</b>	<b>0.0</b>	<b>0.1</b>	<b>0.1</b>
<b>Subtotal F (Contingencies)</b>	<b>1.5</b>	<b>2.1</b>	<b>3.7</b>	<b>1.5</b>	<b>1.2</b>	<b>1.0</b>
<b>H. Interest during Implementation</b>	<b>1.4</b>	<b>0.0</b>	<b>1.4</b>	<b>1.4</b>	<b>0.0</b>	<b>0.0</b>
<b>Total Project Costs</b>	<b>33.5</b>	<b>42.6</b>	<b>76.0</b>	<b>33.5</b>	<b>23.5</b>	<b>19.0</b>
<b>Financing Plan</b>				<b>57.0</b>		<b>19.0</b>
<b>Financing Percentage</b>				<b>75</b>		<b>25</b>

ADB = Asian Development Bank, ADF = Asian Development Fund, Exp. = Expenditure, FX = Foreign currency, kV = kilovolt, LC = Local currency.

Source: ADB 2004. Loan Fact-Finding Mission estimates.

## SUMMARY POVERTY REDUCTION AND SOCIAL STRATEGY

### A. Linkages to the Country Poverty Analysis

Sector identified as a National Priority in Country Poverty Analysis? <b>Yes</b>	Country identified as a National Priority in Country Poverty Partnership Agreement? <b>Yes</b>
<p>Contribution of the subsector to reduce poverty in Pakistan:</p> <p>Of the total Azad Jammu and Kashmir's (AJK) population of 3.4 million, 87% live in the rural areas. The average annual income of the rural population is about \$200-\$250, half of the average income in Pakistan. Economic development in AJK started in early 1970s. However, due to security problems and the low level of investment in social and physical infrastructure, AJK has lagged behind in development. Furthermore, infrastructure damage has displaced several thousand people and deprived communities of basic services, productive assets, and social capital. It has caused loss of people's income and property, and sometimes death, physical injury, psychological stress, and war-related trauma. Lack of funds for operation and maintenance and inefficiency of public institutions have affected public service delivery and physical infrastructure in rural and urban areas.</p> <p>Rehabilitation and extension of essential infrastructure, particularly health, education, water supply, road network, and power and electricity supply, are critical for the revival and improvement of economic activities. Rehabilitation can contribute to employment creation, income generation, rehabilitation of displaced populations, improvement of security and stability, and result in rapid improvement of living conditions and the quality of life of about 3.4 million people in AJK's mainly low-income communities. Improved roads will provide both urban and rural communities with access to better health and education services, reduce travel time and transportation cost, and therefore better access to markets, employment, and services. Establishment of basic facilities on the roadside such as waiting areas (benches and shade) and basic toilet facilities will make passengers safe and comfortable. A regular electric supply will increase economic development in the area. Improved water supply and quality will decrease water-borne diseases. The savings on medical expenses of poor households can be used for the family well-being. Improvement in the quality of and access to drinking water in poor communities in the project area will reduce the time spent by women in fetching water. An awareness campaign for increased use of pipe water will be undertaken in the areas where people depend on unsafe spring water for drinking. Improved hospital and health services will have a great impact on the health condition of the population. Improving pediatric and gynecology services will improve health conditions of children and their mothers. Improved health of the poor will increase their productivity.</p>	

### B. Poverty Analysis

#### Targeted Classification: Targeted intervention

In early 2001, the Government of Pakistan and AJK initiated a participatory poverty assessment as part of the effort to develop more effective poverty reduction policies. The study found that poverty is multidimensional and is influenced by both economic and social factors. The findings indicate that poverty consists of lack of resources (financial and physical assets); lack of access to education, health, and basic services; lack of access to forest; lack of respect; and discrimination. Poverty is not distributed evenly in the society and the well-being of the population depends on gender, age, tribe/caste, family structure, and local conditions. According to the study about two thirds of the people in the communities are very poor or poor. Some characteristics of poverty follow: limited access to secure income and employment; little or no land and livestock; limited access to natural resources; poor quality of houses; dependence on credit; household often in debt; lack of access to basic services (health, education, water); households often with many children; households with no voice in the community and no role in decision making.

Another socioeconomic survey (Project Appraisal document, AJK Community Infrastructure Services project, World Bank, 9 May 2002) estimates that about 46% of the households in AJK live below the poverty line. The poverty line is estimated to be PRs2,500–PRs3,000 per month per household. Reduced

agricultural productivity and rapid increase in population have overburdened subsistence agriculture and caused an increase in out-migration for off-farm employment. A significant percentage of the working force of AJK are employed in the Middle East, Europe, North America, and Pakistan. The unemployment rate is about 37.5% and the large part of the unemployed population are domestic workers, mostly women. Average per capita monthly income is in the range of PRs5,000 – PRs6,000.

Low-income rural and urban communities live in underserved settlements with poor infrastructure facilities and services. The northern part of Neelum valley and those near the Jehlum River in Bagh district and Sudhnoti are the poorest with limited economic and development opportunities. Most of these areas lack access to roads and people have to travel long distances on foot and pay heavy charges to transport goods. Poor roads make it difficult for anyone suffering from a serious ailment or a woman in labor to reach the nearest hospital alive. Water sources are located more than an average 1 kilometer (km) from a household. In many places where pipe water is available, water is directly supplied from the river without proper treatment and thus is unfit to drink. For drinking water, households rely primarily on natural spring water and, in some places in the Southern districts, on dug wells. Focus group interviews with communities and health officials indicate that households suffer mainly from waterborne diseases, which increase family health care expenditures. Access to and quality of health services are poor throughout AJK and most families during the interviews expressed dissatisfaction with the available inadequate health care. While the government has invested significantly in providing access to primary education to all, the quality of infrastructure and education is poor. A large majority of the children are attending dangerous/damaged primary schools. Physical accommodation, equipment, and staff in higher education are inadequate and poor. Poor households suffer more than the others in access to quality water, education, and health services.

The Project is multisectoral. It focuses on health, education, water, roads, and electricity and the activities are designed to increase access to these basic services for the poor. The improvement of school management committees (SMC) and involvement of poor parents in SMC will give them a voice in the local decision-making process. Improving primary schools and availability of teachers for these schools will provide poor children with quality education. Improving hospitals will provide increased access for the semi-urban and rural population. Improving the water supply system with better quality water will reduce waterborne diseases. Engaging local labor in construction work for the Project will increase wage employment opportunities for a large number of poor households.

### C. Participation Process

#### Stakeholder Analysis

Yes

Field visits were made to both rural and urban areas, hospitals, water treatment plant, etc. Rapid social assessment was conducted in 14 villages. Interviews and focus group discussions were conducted with key informants such as teachers, doctors, health workers, community leaders, women, students, and non-government organizations (NGOs) to assess the social and economic conditions of the communities, gender relations, access to water, education, roads, electricity, community involvement in implementing development programs, etc. During field visits showed that community participation in planning development projects was minimal. There are a few NGOs working in AJK. In recent years they have formed community-based organizations (CBOs) for implementing health, water, and education projects. Community organizations and village banks have been formed through a microcredit program of the International Fund for Agriculture Development (IFAD). The efforts of the NGOs and aid organizations have created a process for involving local communities, especially the poor, in local-level development activities.

The Project will be implemented through stakeholder consultation using successful experience in already completed and ongoing projects. Community consultation will be carried out to determine priority in subproject selection. Methodologies conducive to community participation, local capacity building, and the provision of employment will be introduced. Depending on the technical requirements, opportunities for local communities to work in project implementation will be incorporated.

## D. Gender and Development

In AJK, the sex ratio, i.e., males per 100 females is about 101. About 20% of the rural households are headed by women and generally all community and social organizations are headed by men. The exceptions are the CBOs formed by NGOs/aid agencies. Almost 40% CBOs under IFAD project are female CBOs. Government projects generally do not consult women. At the family level, key decisions about farming and other productive matters rest largely with the male heads. However, women are consulted in decisions regarding social and other household affairs. The physical mobility of rural women in AJK is more than that in Pakistan. Rural women are not secluded in AJK, largely because of a significant improvement in literacy rates among them and the absence of feudalism. Unemployment is about 37.5% and a large part of the unemployed population are domestic workers, mostly women. Women in AJK are actively involved in income-generating activities at the household level from both on-farm and off-farm sources. There is also a growing trend among young girls who have completed high school to go for computer and other technical courses so as to get jobs in offices in the urban centers.

According to a recent baseline study, the literacy rate is about 56% among females and about 80% among males. Only about 10% females and about 18% males complete high school, whereas only 4% women and 13% men are able to go beyond high school. The absence of middle and high school facilities for girls in most areas restricts girls' access to secondary education. Girls from poor households drop out from primary school as early as on completion of grade 2 because of domestic work, parents' inability to pay for or lack of interest in girls' education. The World Food Programme's oil distribution program in girls' primary schools is an effort to improve girls' enrollment and attendance in 251 selected schools in Muzaffarabad and Bagh. Most girls' schools in the AJK operate with a small number of teaching staff. This is especially true at high school level where science subjects cannot be taught because of the unavailability of local science teachers, depriving girls of the chance to study science subjects. Further, it is increasingly difficult to get female teachers to work in remote areas because of long hours of travel on poor roads. Women have the primary responsibility for water collection in households and family health care. Women from rural areas have limited access to health care. Women with serious medical complications in the area have to be referred to nearby district hospitals. The Project will pursue the following strategies to maximize impact on women:

**Education.** Women CBOs and SMCs will be mobilized to increase the enrollment of girls in primary and middle schools. Separate toilets will be built for girls and female teachers.

**Water.** At the grassroots level, women CBOs in the project area will be involved in implementing the community awareness program for use of pipe water.

**Health.** Gynecological and pediatric units in district and tehsil (subdistrict) hospitals will be expanded and provided with essential equipment, additional delivery tables in the labor room, and adequate number of lady gynecologists.

**Roads.** The roadside waiting area for passengers will be built. A separate bench for women and children will be placed in the waiting area. A separate toilet for women will be built near the waiting area.

**PIU.** In the project coordination unit (PCU), an official from the women cell of the Planning and Development Department (P&D) will be included. The female officer from the P&D will coordinate with the project implementation units (PIUs) to ensure that the gender strategy is implemented. A social development and gender specialist will be recruited to develop a gender action plan based on the gender strategy, and coordinate with the social marketing consultant for involving female CBOs in designing the awareness campaign. The female officer from P&D in the PCU will coordinate the work of the consultants. In each PIU, one government person will act as gender focal point for the respective sectors. The monitoring and evaluation system of each PIU will develop a gender-disaggregated database to monitor project impact on women.

**E. Social Safeguards and Other Social Risks**

<b>Subject</b>	<b>Significance</b>	<b>Strategy to Address Issues</b>	<b>Plan Required</b>
Resettlement	Significant	Minor land acquisition and resettlement issues will be addressed in accordance with the resettlement framework.	Resettlement plan to be prepared during implementation
Indigenous Peoples	None	There are no indigenous people living in the Project area.	N/A
Labor	Significant	During the field visits and discussion with the local communities, it appeared that the construction companies set up labor camps for laborers from other provinces due to limited availability of local labor. These construction camps lack basic facilities. The labor camps will be provided with water, sanitation and other basic facilities. Maximum effort will be made to employ local labor wherever available.	Bidding documents will require provision of basic facilities in all construction camps as well as employment of local labor wherever available.
Affordability	None	The Project will have a positive impact in reducing services costs. The affordability of improved infrastructure facilities to consumers will be monitored.	No
Other Risks/ Vulnerabilities	None	The Project was designed with particular attention to ensuring equitable and inclusive social development, including the most vulnerable groups, with specific focus on communities.	No

## ENVIRONMENTAL ASSESSMENT AND REVIEW PROCEDURES FRAMEWORK

### A. Introduction

1. The proposed Project is in environmental category B. It has been designed and will be flexibly implemented following a sector approach. Selection of subprojects will be governed by criteria, among which is the requirement that no subproject will have significant adverse impacts on the environment. The Project comprises rehabilitation of social infrastructure, that is, rehabilitation and improvement of existing roads and bridges, water supply systems in major urban centers, education facilities, health facilities, and power distribution systems.

2. An overall initial environmental examination (IEE) was undertaken to assess generic impacts of each subcomponent (Supplementary Appendix C). In addition to the overall IEE, subproject-specific IEEs have been prepared for two sample subprojects (Muzzafarabad Water Supply System and for Khaigalla-Hjaira road) to serve as model in preparing IEEs during implementation. This environmental assessment and review procedures framework (EARPF) was prepared to guide the environmental assessment of subprojects for each subcomponent and facilitate compliance with environmental requirements of the Asian Development Bank (ADB) (including the *Environment Policy* 2002), and the Azad Jammu and Kashmir (AJK) Environmental Protection Act 2000, during implementation.

### B. Overview of Type of Subprojects to Be Assessed

3. The proposed Project comprises the following components: (i) rehabilitation and improvement of health services, (ii) rehabilitation and improvement of education services, (iii) rehabilitation and improvement of the power distribution network, (iv) improvement of water supply systems, and (v) rehabilitation of roads and rehabilitation/replacement of bridges. All subprojects of all these components will be subject to environmental assessment and review procedures. The health component, which includes provision of equipment and rehabilitation of existing facilities/reconstruction of some buildings, will not have any significantly adverse impacts on the environment. Very minor impacts resulting from reconstruction activities can easily be mitigated. Similarly, the education component that includes rehabilitation of existing buildings, construction of small primary school buildings, and provision of facilities will also have no significantly adverse environmental impacts. Rehabilitation of power distribution systems that includes replacing certain power lines, transmission poles, and transformers will result in only temporary disruptions and no adverse impacts on the environment. In fact, by rehabilitating the power transmission systems, transmission leakages will be reduced, and more electricity will be available to consumers. As a consequence, reduced dependence on fossil fuels, wood energy, and other environmentally unsafe materials, will result in a positive impact on the environment.

4. Rehabilitation and/or replacement of bridges will have minimal adverse impact on the environment. The design of road rehabilitation and improvement will ensure minimal impact on the hilly landscape and immediate mitigation of minor impacts. Rehabilitation and improvement of water supply schemes will have positive environmental impacts due to appropriate water treatment that will ensure a supply of clean water to consumers, ascertained through regular monitoring of water quality. The component will also ensure adequate protection and security of water sources, treatments plants, pumps, and other systems; and will prevent any chances of contamination in the distribution system by keeping water distribution mains separate from sewerage systems and away from areas where potentially health-risk generating solid waste accumulates. Capacity building for concerned institutions and awareness enhancement

measures for the target communities will enhance accountability, ensure distribution of safe drinking water, and prevent potential health hazards.

### **C. Country's Environmental Assessment and Review Procedures**

5. The AJK Environmental Protection Act requires environmental assessments for all public and private sector development projects, depending on the category of environmental adversities. AJK Environmental Protection Agency (AJKEPA), which issues environmental clearance, ratifies the executing agency reports. Compliance with the environmental aspects of development interventions in AJK is primarily governed by the AJK Environmental Protection Act was adopted from the Pakistan Environmental Protection Act 1997. Associated legislation that will be relevant to managing environmental compliance includes (i) Fisheries Regulation 1902; (ii) Jammu & Kashmir Forest Regulation No. 2 of 1930, and Forest (Sale of Timber) Act, 1930; (iii) Azad Kashmir Logging and Sawmill Corporation Act, 1985; (iv) Ordinance XICX of 1980, providing for the law relating forest protection and distribution of timber through local bodies; and (v) Azad Jammu and Kashmir Wildlife Preservation Act, 1975. The institutions responsible for compliance are led by AJKEPA and assisted by the Forest Department, Police Department, Fisheries Department, and Revenue Department. AJKEPA is also responsible for regular monitoring of environmental safeguards during implementation.

### **D. Specific Procedure of Environmental Assessment of Subprojects**

#### **1. Responsibilities, Authorities, and Procedure for Environmental Assessment**

6. An IEE will be carried out for each subproject in all components of the Project during implementation. The IEE report and a summary IEE (SIEE) report for each proposed subproject will be prepared as part of a feasibility study report and conducted by experts working with concerned line agencies through their project implementation units (PIUs) under the overall guidance of the Executing Agency (Planning and Development Department [P&D] of AJK) through its project coordination unit (PCU), and AJKEPA. For each of subproject, the IEE/SIEE will include an environmental management plan (EMP) with specific mitigation measures and financial sources as pre-requisite for approval, and a monitoring and enforcement program will be developed to ensure that none of the components result in any significantly adverse impacts.

7. Public consultation will be conducted through interviews, meetings, or surveys as part of environmental assessment for each subproject-based on the public involvement procedures and guidelines established by AJKEPA, and the results will be documented and reflected in IEEs.

8. The IEEs for all subprojects will follow the format of ADB's guidelines in preparing IEEs and this EARPF. For all subprojects exceeding a total cost of \$1.5 million, the IEEs will be submitted to AJKEPA for review and then to ADB for review and approval 6 weeks before implementation. All other IEEs will be approved by AJKEPA prior to implementation. The Social Sectors Division of ADB, in consultation with Regional and Sustainable Development Department, will be responsible for review and approval of IEEs submitted to ADB.

9. To mitigate any potential adverse impacts, identified environmental measures will be incorporated into the subproject design. AJKEPA and its subordinate offices will monitor environmental mitigation measures as detailed in the EMPs for various components. In addition, P&D through its PCU will be provided additional expertise for regular environmental monitoring and reporting during implementation.

10. Since the environmental assessment report is subject to public disclosure, all IEE reports of subprojects will be kept in the project files and made available to the public on demand. P&D and the implementing agencies will be responsible for monitoring implementation of the IEE reports including the EMP. ADB will undertake implementation monitoring as part of its administrative responsibilities under the Project.

## **2. Environmental Criteria of Subproject Selection**

11. Environment-specific criteria included in the criteria for selecting subprojects state: (i) the proposed subproject is environmentally sound as determined through an environmental examination carried out in accordance with applicable laws and regulations of the Government, ADB guidelines, and this EARPF; and (ii) the subprojects or components or subcomponents of subprojects involving rehabilitation of social infrastructure such as roads and water supply schemes, will be undertaken within the existing rights-of-way, and any losses associated with land acquisition or resettlement will adequately be compensated.

### **E. Staffing Requirements and Budget**

12. A qualified domestic environmental consultant will be recruited for 36 person-months by the PCU during project implementation to (i) prepare the IEE/SIEEs, (ii) ensure compliance with the mitigating measures proposed in the IEEs and EMPs for all components or subprojects funded by the Project, and (iii) provide necessary training. Supplementary Appendix A gives the terms of reference.

13. To facilitate regular monitoring of compliance with environmental quality standards in case of water supply systems, road rehabilitation and other construction activities, and the recommendations in the EMPs of the respective subproject IEEs, AJKEPA will be strengthened in terms of equipment, facilities, and consulting services. The Public Works Department as well as its Public Health Engineering Circle (Environmental Management Unit) will be strengthened through facilities, equipment, and consulting services to enhance its capacity for environmental monitoring and mainstreaming environmental management, especially for water supply systems, roads rehabilitation, and other construction activities.

14. Since environmental management will be an integral part of project design, construction, and operational activities, each subproject includes cost estimates for environmental mitigation and monitoring as part of the EMP. Specific details on the cost of environmental mitigation measures will be available as detailed feasibility study reports are prepared for each subproject during implementation.

15. AJKEPA, which is primarily responsible for environmental monitoring, is headed by a director. The position is being upgraded to the level of director general. The agency has a laboratory at Muzzafarabad, which is in dire need of capacity building. Due to capacity constraints, AJKEPA is not able to meet all its monitoring requirements and hence needs significant input of resources to bring it to a point where it can adequately deliver its mandate. AJKEPA also has the responsibility for strengthening the capacities of line agencies to carry out environmental management and monitoring.

## SUMMARY RESETTLEMENT FRAMEWORK AND PROCEDURAL GUIDELINES

### A. Introduction

1. For the Project's five components, minor land acquisition and resettlement will be required in the case of the water supply systems and the roads and bridges components. To ensure land acquisition in accordance with the Asian Development Bank's (ADB) *Involuntary Resettlement Policy*, a resettlement framework (RF) and procedural guidelines have been prepared in accordance with ADB's 1998 *Handbook on Resettlement*, and signed by the government of Azad Jammu and Kashmir (AJKG). The RF will guide the Planning and Development Department (P&D) as Executing Agency (EA) and implementing agencies in preparing short land acquisition and resettlements plans (LARPs) when required. The RF and the procedural guidelines are detailed in Supplementary Appendix B and summarized below:

### B. Scope of Land Acquisition and Resettlement Impacts

2. From available information, land acquisition and resettlement impacts are considered minor and insignificant. Rehabilitation and improvement of health services, of education services, and of the power distribution network will not involve any land acquisition or resettlement. However, land acquisition, although minimal, will be required for the roads and bridges component and, to a certain extent, in the water supply systems component. Minor resettlement will be needed for certain road sections (for widening purposes) and bridges (for appropriate locations). About 45 hectares (ha), mostly secondary forest along roads will be needed for roads and bridges and is estimated to cost about \$350,000 equivalent. About 1 ha of land that will be acquired for the water supply systems component at Bhimber, Dirkot, Kotli, and Nakyal, is estimated to cost about \$225,000 equivalent.

### C. Legal Framework, Land Acquisition and Resettlement Principles, and Eligibility for Compensation

3. Land will be acquired with the consent of the owners at market prices paid and calculated based on the Land Revenue Records and ADB guidelines. The total number of affected persons (APs) will be determined after (i) proper demarcation of land by the concerned agencies, (ii) measurement of land by the land revenue department, (iii) preparation by the land revenue department of the list of owners of the land to be acquired. All land acquisition will be carried out under the Azad Jammu and Kashmir Land Acquisition Act 1894, as amended, and Land Acquisition Rules 1994. In accordance with these rules and incorporating ADB's policy on involuntary resettlement, the basic principles of land acquisition and resettlement will, among other things, include these provisions: (i) minimize negative impacts as much as possible; (ii) carry out land acquisition/resettlement and compensation to improve or at least restore the preproject income and living standards of the APs; (iii) fully inform and allow close consultation with APs on compensation options and the LARPs to be prepared during implementation; (iv) provide assets and resettlement at replacement rates; (v) provide compensation for lost land, assets, and resettlement allowances in full before land requisition and structure demolition; (vi) require disbursements for each subproject to be conditional on ADB's approval of the subproject/component LARPs; (vii) give prior notice to the private agriculture landowner and tenant farmers before harvesting the crops; (viii) pay leaseholders an amount equal to the annual land rent if land is acquired before completion of 1 year of his contract; (ix) lack of legal documents for their customary rights or occupancy certificates will not affect eligibility for compensation; (x) this RF will apply to all components under the Project and all APs whether or not they are directly funded by ADB or regardless of the severity of impact; (xi) pay particular

attention to the needs of vulnerable groups, defined as affected households that are below the poverty line, or have only elderly members, or single parent or ethnic nationality; and (xii) ensure compliance of land acquisition and resettlement policy and procedures with all AJKG legislation, rules, and procedures on land acquisition and ADB's policy and guidelines.

#### D. Entitlements

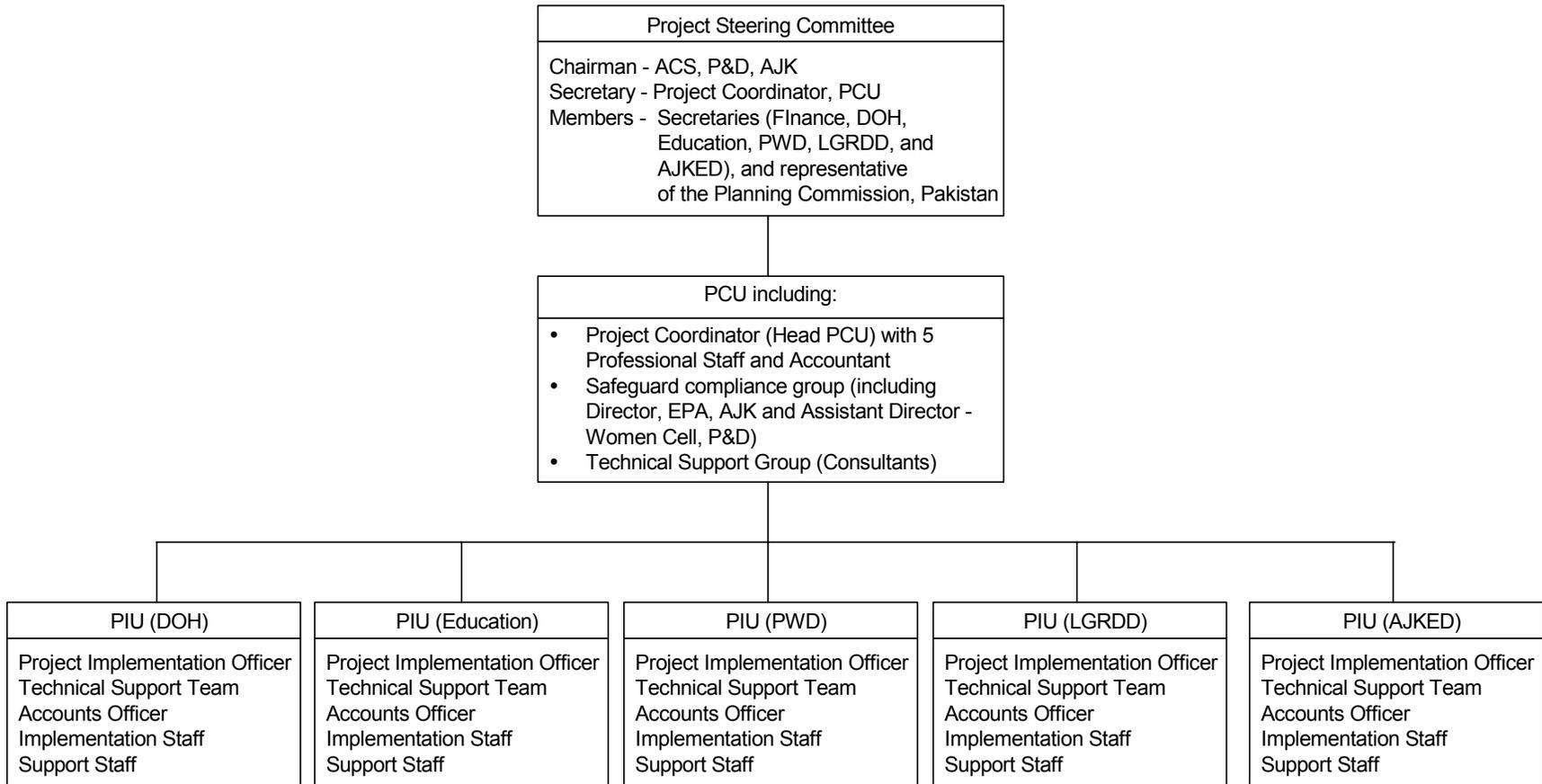
4. The affected households/persons will receive entitlement according to the type of impact, their eligibility, and compensation standards set out in the entitlement matrix below:

Type of Loss	Entitlement Unit	Entitlement and Implementation Procedures	Remarks
<b>1. Agricultural, Residential, and Other Related Lands</b>			
1.1 Loss of Private land	<ul style="list-style-type: none"> <li>Landowner</li> <li>Occupancy tenant (sharecropping tenant registered in the records of rights)</li> </ul>	<ul style="list-style-type: none"> <li>Affected Persons (APs) will get compensation at full replacement cost.</li> <li>APs will have the option to relinquish the remainder of that parcel or landholding if they feel that the remaining land after acquisition is too small to be viable for cultivation or other use. APs who choose to relinquish the whole parcel of landholding will be entitled to cash compensation at replacement cost for the entire parcel.</li> <li>Rehabilitation cost, where applicable, will be given to APs according to a mutually agreed-upon formula.</li> <li>Tenant will get compensation equivalent to his crop share if the land were acquired before harvest of standing crops cultivated by that tenant.</li> <li>Squatters, if any, will be compensated and rehabilitated.</li> </ul>	<ul style="list-style-type: none"> <li>Owners include all household members in whose name land title is registered in record of rights maintained by land revenue department.</li> <li>Occupancy tenant will share the compensation with landowner for land as per his rights registered in the records of rights.</li> <li>If new land is purchased by APs, government shall waive the mutation fee levied on buyer of land.</li> <li>Compensation will be made preferably through check.</li> <li>The grievance committee will comprise representatives of APs and will be endorsed by the project implementation unit (PIU) and district administration.</li> </ul>
1.2 Loss of leaseholder's contract	<ul style="list-style-type: none"> <li>Leaseholder possessing legal agreement for lease of specific land for a specified period</li> </ul>	<ul style="list-style-type: none"> <li>Prior notice will be given to harvest crops.</li> <li>Leaseholder will be paid an amount equal to the annual land rent if land is acquired before completion of 1 year of his contract.</li> <li>If land is acquired after completion of the first contract year and the remaining lease period in agreement is longer than a year, then the leaseholder will be paid 50% of the value of annual rent as compensation for termination of contract.</li> </ul>	<ul style="list-style-type: none"> <li>Leaseholder will pay 1 month's salary to his employees working on the leased land considered acquisition.</li> </ul>

*Continued on next page*

Type of Loss	Entitlement Unit	Entitlement and Implementation Procedures	Remarks
1.3 Loss of livelihood	<ul style="list-style-type: none"> <li>Sharecropping tenant-at-will (temporary tenant without legal security of tenure)</li> <li>Agricultural labor employed on regular basis and not on daily wages</li> </ul>	<ul style="list-style-type: none"> <li>This category is not entitled to land compensation, but will be compensated for particular crops and other associated benefits accruing in that cropping season, according to market rates, income restoration program for the particularly disadvantaged.</li> <li>Sharecropping tenants will get compensation equivalent to their crop share if the land is acquired before harvest of standing crops.</li> </ul>	<ul style="list-style-type: none"> <li>Sharecropping tenant-at-will and agricultural labor where possible will be preferred for employment in civil works under the Project on priority basis.</li> </ul>
1.4 Temporary Loss of Private Land	<ul style="list-style-type: none"> <li>As specified in 1.1 and 1.2</li> </ul>	<ul style="list-style-type: none"> <li>Land rent will be paid for temporary loss of land due to construction activities for the duration of disturbance.</li> <li>The value of produce for that cropping season(s) will be paid for disturbed agricultural land.</li> <li>Any structures demolished or damaged (e.g., watercourses, embankments, etc.) will be restored to their original condition.</li> <li>The land will be returned to owners in actual form, leveled to the best possible original condition.</li> </ul>	<ul style="list-style-type: none"> <li>This would be agreed upon between the PIU/executing agency and the APs.</li> </ul>
1.5 Restricted/partial use of land for passage of pipeline, etc.	<ul style="list-style-type: none"> <li>Owners/users</li> </ul>	<ul style="list-style-type: none"> <li>Compensation for crops, including any infrastructure such as watercourse, path, etc., will be paid to owners.</li> <li>Land will be returned to owner/user after restoring it to the closest possible original condition.</li> </ul>	<ul style="list-style-type: none"> <li>Land rent in lieu of crop value can be paid to owners, after mutual agreement.</li> </ul>
<b>2. Crops and Trees</b>			
2.1 Loss of trees and perennial crops	<ul style="list-style-type: none"> <li>Owner/sharecropping tenant/leaseholder</li> </ul>	<ul style="list-style-type: none"> <li>Prior notice will be given for harvest of crops.</li> <li>Market value of produce will be paid where land is acquired before harvest of crops.</li> <li>Compensation for fruit trees and other trees for timber will be negotiated in the agreement for sale of land.</li> </ul>	<ul style="list-style-type: none"> <li>The agreement for land acquisition with every landowner will specifically mention compensation for trees and logs.</li> </ul>
2.2 Loss of nonperennial crops	<ul style="list-style-type: none"> <li>Owner/sharecropping tenant/leaseholder</li> </ul>	<ul style="list-style-type: none"> <li>Advance notice to harvest crops will be given.</li> <li>Net value of produce will be paid if land is acquired before harvest of crops.</li> </ul>	<ul style="list-style-type: none"> <li>Prices for compensation of standing crops will be valued at current market price.</li> <li>The compensation will be shared between owner and sharecropping tenant or leaseholder according to their mutual agreement on crop share or land rent.</li> </ul>

**IMPLEMENTATION FRAMEWORK**



ACS = additional chief secretary, AJK = Azad Jammu and Kashmir, AJKED = AJK Electricity Department, DOH = Department of Health, EPA = Environmental Protection Agency, LGRDD = Local Government and Rural Development Department, P&D = Planning and Development Department, PCU = project coordination unit, PIU = project implementation unit, PWD = Public Works Department.

**IMPLEMENTATION SCHEDULE**

<b>Project Activities</b>	<b>2005</b>			<b>2006</b>			<b>2007</b>			<b>2008</b>		
<b>Consultant Selection</b>	█	█										
<b>Component A: Health</b>												
Bidding Documents/ Supply Contract		█	█									
Procurement of Equipment			█				█	█	█			
Civil Works Designs		█	█									
Construction		█	█	█	█	█	█	█	█			
<b>Component B: Education</b>												
Schools Selection		█	█									
Community Mobilization		█	█	█	█	█						
Civil Works Designs		█	█	█	█	█						
Construction			█	█	█	█	█	█	█	█	█	█
<b>Component C: Water Supply</b>												
Land Acquisition	█	█	█									
Civil Works Designs		█	█	█	█	█						
Construction			█	█	█	█	█	█	█	█	█	█
Procurement and Installation of Machinery					█	█	█	█	█	█	█	█
<b>Component D: Roads and Bridges</b>												
Feasibility and Road Selection		█	█	█	█	█						
Land Acquisition		█	█	█	█	█						
Detailed Design/Bidding			█	█	█	█						
Construction				█	█	█	█	█	█	█	█	█
<b>Component E: Power</b>												
Subproject Selection	█	█	█									
Detailed Design/Bidding Documents	█	█	█									
Procurement		█	█	█	█	█						
Manufacture and Delivery			█	█	█	█	█	█	█			
Installation				█	█	█	█	█	█	█	█	█
Testing and Commission						█	█	█	█	█	█	█

### PROPOSED CONTRACT PACKAGES

Description	Packages (no.)	Method	Amount (\$ million)
A-1. Extension and rehabilitation of accident and emergency departments of 8 DHQ hospitals	Multiple	LCB	1.5
A-2. Rehabilitation/reconstruction of 4 THQ hospitals	Multiple	LCB	1.0
A-3. Supply of medical equipment for 8 DHQ and 4 THQ hospitals	Multiple	ICB/LCB/IS	7.7
B-1. Rehabilitation/reconstruction of primary and middle schools	Multiple	LCB	0.2
B-2. Rehabilitation/improvement of middle and high schools	Multiple	LCB	3.6
B-3. Construction of water supply and sanitation facilities for all schools	Multiple	LCB	0.7
B-4. Supply of furniture, equipment, and vehicles	Multiple	LCB/IS/DP	0.6
B-5. MIS implementation	2	LCB/IS/DP	0.1
C-1. Supply and installation of pipes for water transmission and distribution, tubewells, pumps, and transformer	Multiple	LCB/IS	6.1
C-2. Rehabilitation of water treatment plant at Muzaffarabad	1	ICB	2.5
D-1. Rehabilitation and improvement of primary roads	Multiple	LCB	14.5
D-2. Construction/replacement of bridges	Multiple	LCB	6.3
D-3. Construction of suspension bridges for jeeps and footbridges	Multiple	LCB	2.3
E-1. Supply of conductors (Dog, Rabbit, Panther, Wasp, Ant)	Multiple	ICB	6.5
E-2. Supply of capacitor banks (11 kV, 450 KVAR)	1	ICB	0.8
E-3. Supply of 11 kV/0.4 kV transformers and accessories (50, 100, 200 KVA)	Multiple	ICB	2.7
E-4. Supply of meters and accessories (1-phase meters, 3-phase meters, bulk metering panels, etc.)	Multiple	ICB	4.1
E-5. Supply of poles (lattice steel structures) (31 ft, 36 ft, 40 ft, 44 ft, 45 ft poles)	Multiple	ICB/LCB/IS	0.8
E-6. Supply of line hardware (cross-arms, stay sets, connectors, nuts and bolts, etc.)	Multiple	ICB/LCB/IS	0.6
E-7. Supply of maintenance equipment (pickups, trucks, tools)	Multiple	ICB/LCB/IS	0.9
E-8. Installation contracts	Multiple	LCB	1.3
Provide consulting services for project implementation support (Package A)	1	LCB	2.2
Provide consulting services for project implementation support (Package B)	1	LCB	2.1
Supply of vehicles	Multiple	LCB/DP	1.0
Supply of computers, printers, and other office equipment	Multiple	LCB	0.1
<b>Total</b>			<b>70.2</b>
Excluded		Land acquisition/resettlement	0.6
		Incremental administration	3.8
		Interest during implementation	1.4
<b>Grand Total</b>			<b>76</b>

DP = direct purchase, DHQ = district headquarters, ft = foot, ICB = international competitive bidding, IS = international shopping, kV = kilovolt, kVA = kilovolt-ampere, LCB = local competitive bidding, MIS = management information system, PCU = project coordination unit, PIU = project implementation unit, THQ = tehsil headquarters.

Note: Serial numbers of contracts with A to E relate to contracts for components A to E, respectively.

## SUMMARY INITIAL ENVIRONMENTAL ASSESSMENT

### A. Introduction

1. The proposed Project is in environmental category “B” in accordance with the Asian Development Bank’s (ADB’s) *Environment Policy* 2002, as it primarily focuses on rehabilitation of existing social infrastructure, with none or minimal adverse impacts on the environment, which can easily be mitigated. Given a large number of interventions and widely dispersed nature of subprojects under components B, D, and E, the Project has been designed and will be flexibly implemented following a sector approach. A sector loan modality has been followed in environmental assessment. Accordingly, selection of subprojects will be governed by criteria that, among other things, stipulate that there is no significant adverse impacts on environment.

2. An overall environmental assessment was undertaken to determine generic environmental impacts of each subcomponent during May-June 2004 in accordance with ADB’s *Environmental Assessment Guidelines* and the government of AJK’s (AJKG’s) environmental requirements (see Supplementary Appendix C). At the same time, subproject-specific initial environmental examinations (IEEs) were prepared for two comparatively sensitive subprojects (Muzaffarabad Water Supply System and Khaigalla-Hjaira road) to serve as samples for environmental assessment and models in preparing IEEs during implementation. In addition, an environmental assessment and review procedures framework (EARPF) has been developed to guide environmental assessment of the subprojects during implementation (Appendix 10) and to facilitate compliance with AJKG’s regulations and ADB’s environmental guidelines. All subprojects of all project components will be subject to the EARPF. As indicated in the EARPF, IEEs for all subprojects will be prepared by the Executing Agency (EA) and approved by AJK Environmental Protection Agency (AJKEPA). IEEs for subprojects with estimated costs exceeding \$1.5 million will be subject to approval by ADB. Following clearance by AJKG, this environmental assessment report and the EARPF will be posted on ADB’s web site.

### B. Overview of the Project

3. The objective of the Project is to improve living conditions and the quality of life in AJK by rehabilitating and reconstructing essential physical and social infrastructure that were damaged by decades of neglect. The Project will provide rapid improvement in the well-being of about 3.4 million people in AJK, mainly low-income communities. The Project, briefly described in the following sections, comprises five components: (i) rehabilitation and improvement of health services, (ii) rehabilitation and improvement of education services, (iii) rehabilitation and improvement of water supply systems, (iv) rehabilitation of roads and bridges, and (v) rehabilitation and improvement of the power distribution network.

4. **Rehabilitation and Improvement of Health Services.** This component includes (i) extension and rehabilitation of accident and emergency departments of eight district headquarters (DHQ) hospitals including civil works and equipment; (ii) provision of essential equipment to pediatric and gynecology departments in these hospitals; (iii) rehabilitation of tehsil (subdistrict) headquarters (THQ) hospitals at Athmuqam, Burnala, Fathehpur, and Kahuta through repair and renovation of existing buildings and construction of a 30-bed ward with an operation theater; construction of hostels for nurses/other staff and accommodations for doctors; and provision of diagnostic facilities like X-ray machine, laboratory facilities, and ECG machine; (iv) development of proper waiting areas and provision of public toilet and clean drinking water facilities for visitors at the DHQ and THQ hospitals; (v) enhancing technical

capacity of doctors; (vi) incremental administrative support to the project implementation unit (PIU); and (vii) consultancy assistance for design and construction supervision of civil works.

5. **Rehabilitation and Improvement of Education Services.** This component aims to rehabilitate, immediately restore, and improve education services, and includes including (i) rehabilitation/reconstruction of 30 damaged primary schools and 7 damaged middle school buildings; (ii) repair and improvement of about 56 middle schools and 56 high schools as per agreed-upon criteria; (iii) provision of water and sanitation facilities to all schools where such facilities are inadequate; (iv) consultancy assistance to the education department to build capacity by training the teaching staff including in-service training of follow-up learning material, developing a comprehensive management information system (MIS), improving management and planning capacity of the education department, and design and construction of civil works; (v) strengthening of school management committees (SMCs) through community mobilization and training; and (vi) funding of recurrent expenditure of the PIU and salaries of the PIU staff.

6. **Rehabilitation and Improvement of Water Supply Systems.** This component includes (i) rehabilitation and extension of the existing water supply network, including rehabilitating existing treatment plants in all the seven DHQ and four selected THQ towns; and (ii) strengthening and building the capacity of the Public Works Department (PWD) and its Public Health Engineering Department (PHED) to organize and manage water supply in a cost-effective manner.

7. **Rehabilitation of Roads and Bridges.** This component covers rehabilitation and improvement of roads providing inter- and intra-district links and improving subregional connectivity with Pakistan and the other side of the line of control; construction of major bridges, suspension bridges for jeeps, and suspension footbridges to provide access to remote areas. It includes (i) rehabilitation and improvement of a minimum of 130 kilometers (km) of the primary road network, (ii) construction/replacement of a minimum of 650 meters (m) of major bridges on primary roads, (iii) construction of about 1,050 m suspension bridges on secondary/tertiary roads to improve connectivity, (iv) construction of about 1,050 m of suspension footbridges to improve connectivity of remotely located communities, and (v) policy reforms and capacity building.

8. **Rehabilitation and Improvement of Power Distribution Network.** This component will help reduce system losses and improve the reliability of the existing power distribution network through (i) rehabilitation and augmentation of about 750 km of 11 kilovolt (kV) lines, (ii) rehabilitation and augmentation of about 900 km of 0.4 kV lines, (iii) replacement and addition of 11 kV/0.4 kV transformers, and (iv) rehabilitation and augmentation of service connections. The Project will also procure necessary equipment and tools for adequate operation and maintenance of the power distribution network, and consulting services.

### **C. Environmental Assessment of Potential Impacts**

9. The health component, which will provide equipment, and rehabilitate existing facilities, and reconstruct buildings, will not have any significantly adverse impacts on the environment. Very minor impacts resulting from reconstruction activities can easily be mitigated. Similarly, the education component that will rehabilitate existing buildings, construct small primary school buildings, and provide other facilities will have no significantly adverse environmental impacts. Rehabilitation of power distribution systems that includes replacing certain power lines, transmission poles, and transformers will result in only temporary disruptions and no adverse impacts on the environment. Rehabilitating the power transmission systems will reduce

transmission leakages, making more electricity available to consumers. The reduced dependence on fossil fuels and wood energy will result in positive impacts on the environment.

10. Rehabilitation and/or replacement of bridges will have no adverse environmental impact. Road rehabilitation and improvement will be designed and executed to ensure minimal impact on the hilly landscape and immediate mitigation of minor impacts that might result. The design entails maintaining the current alignment of the roads, constructing side drains, cross drains, breast walls, and retaining walls, and various anti-erosion measures such as (i) engineering measures such as check dams, gabions; and (ii) biological control measures that include revegetation of slopes using soil-binding species where such measures have not yet been applied. These measures will ensure road stability and facilitate road safety for both passengers and vehicles, with positive environmental impacts.

11. Rehabilitation and improvement of water supply schemes will have positive environmental impacts by applying appropriate water treatment that ensures availability of clean water to consumers, ascertained through regular monitoring of water quality. The component will also ensure adequate protection and security of water treatment facilities, pumps and associated equipment, and prevent any chances of contamination in the distribution system by keeping water distribution mains separate from sewerage systems and away from areas where potentially health-risk generating solid waste accumulates. Capacity building for concerned institutions and awareness enhancement measures for the target communities will enhance accountability, ensure distribution of safe drinking water, and prevent potential health hazards.

#### **D. Summary IEEs of Selected Sample Subprojects**

12. As stated earlier (para. 2), IEE reports were prepared for two sample subprojects (Supplementary Appendix C). The summary IEEs for the two are reproduced in this section.

##### **1. Muzaffarabad Water Supply Systems Subproject**

13. **Objectives and Scope of the Subproject.** The proposed subproject aims to improve and upgrade the water supply system (WSS) of the capital city Muzaffarabad. The city has a hilly and undulating topography, with Neelum River serving as the main source of drainage. The subproject will improve water quality by rehabilitating the water treatment facility of 4 million gallons per day (mgd) capacity, and increasing the quantity of available water by rehabilitating the pumps currently in a dilapidated condition. The subproject will also rehabilitate the water distribution network by fixing leakages in the pumps, delivery mechanisms, and supply lines. Rehabilitation of the WSS will improve the quantity of water to meet the continuously increasing demand and enhance its quality to ensure a safe supply.

14. **Subproject Description.** Specific interventions under the subproject include (i) constructing a 4.0 km gravity water channel for drawing raw water from the river; (ii) repairing and reconstructing pump houses/platforms, filters and other related infrastructure; (iii) re-laying and changing the water filtration media; (iv) replacing and re-laying damaged mains; (v) refurbishing and re-equipping laboratories; (vi) installing perimeter fences with security lighting arrangements; (vii) renovating electrical systems; (viii) replacing pumping equipment; and (ix) providing and installing personal safety equipment.

15. **Description of the Environment.** Muzaffarabad is the largest district of AJK, spread over an area of 6,117 km<sup>2</sup>, with a population of about 833,000. The city has a population of 120,000 with 97% of residents having access to piped water. Average literacy rate in AJK is

60%, relatively better than the national average. Being an urban settlement, the area has no endangered flora or fauna.

16. **Potential Environmental Impacts and Mitigation Measures.** Environmental impacts are expected to be positive. Appropriate treatment and testing of water before its distribution will ensure safe and clean drinking water for the urban consumers. Repairs and renovation of leaking mains and distribution system will enhance water availability, thereby addressing deficiencies in water supply. Adverse environmental impacts such as noise, dust, physical inconvenience, and contamination by oils and lubricants during construction will be minor and temporary and can easily be mitigated. Water quality monitoring will be an important element of environmental management. Due to its sensitive nature, all WSS installations will be secured through proper perimeter fencing and other measures.

17. **Public Consultation and Information Disclosure.** Consultations were held with a large number of stakeholders including government officials, consumers—city dwellers, shopkeepers, and hoteliers—and public representatives. Field officials of related agencies also participated in the consultation and sessions on the scope. Inquiries were also made on current water-related issues and future problems once the WSS has been rehabilitated. In general, people displayed a positive attitude, a strong desire, and an urge to see an improved WSS in their city responding to the qualitative and quantitative demands of the residents.

18. **Findings and Recommendations.** The IEE findings indicate that the environmental impacts of the subproject are minor and can easily be mitigated by implementing an environmental management plan (EMP), which is an integral part of the IEE. At the same time the environmental safeguards will have to be monitored by concerned agencies, including environmental consultants and AJKEPA. Due diligence, with mandatory coordination among various stakeholders, will ensure mitigation of any adverse impacts. The subproject area is not considered environmentally sensitive and the measures recommended to adequately mitigate the impact on the environment with careful monitoring on a regular basis, will ensure no permanent adverse impacts. The mitigation measures are deemed adequate for the minor impacts identified. In view of these findings, an environmental impact assessment (EIA) is not required.

## 2. Khaigalla-Hajira Road

19. **Objectives and Scope of the Subproject.** The proposed subproject will rehabilitate and improve an existing 18 km road from Khaigalla to Hajira in Poonch district. It provides an important communication link between Rawalakote DHQ and Hajira, the THQ. Rehabilitation work comprises upgrading and improving to meet the growing traffic demand and enhance road safety. The subproject will also respond to the demands of growing domestic tourism, owing to the spectacular landscape of the district. Tourism can be a source of additional revenue in the pockets of poverty in the state.

20. **Location of the Subproject.** The road runs along the eastern, southeastern, and southern areas of a large bowl-shaped valley in the district, descending from Khaigalla saddle and reaching the valley bed at Hajira. It comprises a segment of the main Rawalakote–Hajira road, which is linked to Islamabad. The subproject road passes through mountainous terrain, descending all the way to its end point at Hajira.

21. **Subproject Description.** The subproject will comprise (i) widening by about 1 meter, mostly toward the hillside, entailing excavations and limited blasting; (ii) repair and

reconstruction of cross drainage structures; (iii) repair and reconstruction of breast, retaining and toe walls; (iv) construction of side drains; (v) scrapping of existing bituminous blacktopped pavement and re-laying it on the entire road; and (vi) engineering and vegetative slope stabilization measures. A limited number of shops and houses may need to relocate, but a graveyard will be avoided during road widening.

22. The subproject area displays a mixture of soils: isolated pockets of reddish brown shale, with at times fissured and weathered boulders. The stones are not suitable for construction, as they crumble under load. The subproject site falls at the confluence of dry subtropical zone in the south toward Hajira and moist tropical zone in the north toward Rawalakote. The upper reaches support reasonably good forests of young *Pinus wallichiana* and its broadleaved associates. In the lower reaches, terraced rain-fed cultivation is practiced with maize as the main crop. In the lower warmer areas, the vegetation changes to *Pinus roxburgii*. The main terrestrial wildlife in the area comprises rabbits, jackals, and foxes. No rare or endangered flora or fauna are found in the area.

23. **Description of the Environment.** Poonch District has an area of 855 km<sup>2</sup>, with a population of about 400,000. The average household size is 7.6 with an urban proportion of 13.10%, and an overall population density of 480 persons per km<sup>2</sup>. Major occupations are farming and cattle raising. The road traverses a thickly populated rural panorama, where most households have electricity and piped water supply. A major segment of the rural population has access to primary, middle, and high schools, for boys as well as for girls.

24. **Potential Environmental Impacts and Mitigation Measures.** The IEE findings indicate minor environmental impacts from the subproject. They may include dumping of debris and soil, rolling down of debris to farmlands and dwellings, damage to trees, diversions of traffic, noise and other forms of nuisance. These impacts can easily be mitigated by implementing mitigation measures given in the EMP. Roadside stabilization measures such as adequate drainage, retaining walls, and breast walls, will be an integral part of the road rehabilitation processes. All excavated spoil will be safely disposed of. Damage to public utilities, like water supply pipes, electricity/phone poles will be minimized. Graveyards will be avoided and the existing alignment will be maintained and expansion limited to current right-of-way. To ensure compliance with environmental safeguards and mitigation measures, monitoring will be undertaken by concerned agencies, consultants, and AJKEPA.

25. The subproject passes through forests, already under severe biotic pressure resulting in accelerated soil erosion. Excavations that may further accelerate erosion will therefore be avoided by adopting engineering cum vegetative measures for slope stabilization. Damage to trees will be avoided and any unavoidable removal of trees will be carried out in consultation with the Forest Department.

26. **Public Consultation and Information Disclosure.** Consultation with stakeholders during the preparation of the IEE involved government officials, roadside dwellers, villagers, shopkeepers, drivers, transport operators, potential beneficiaries, and available public representatives. Field officials of related agencies were also visited and participated in consultation and sessions to determine scope. In general, people displayed a highly positive attitude toward the subproject.

27. **Findings and Recommendations.** The subproject area is not considered environmentally sensitive and does not pass through any ecologically or culturally sensitive sites. The measures recommended in the EMP will adequately mitigate any adverse impacts on

the environment, given the regular monitoring. Proposed mitigation measures are deemed adequate for the minor impacts identified. In view of these findings, an EIA for Khaigalla–Hajira road is not required.

#### **E. Environmental Criteria for Subproject Selection**

28. Since the Project will adopt a sector approach in the design and implementation of the various subprojects, subprojects under each component will be selected on the basis of selection criteria agreed-upon with the Government. Environment-specific criteria included among the selection criteria are as follows:

- (i) The proposed subproject is environmentally sound as determined through an environmental examination carried out in accordance with applicable laws and regulations of the Government, ADB guidelines, and the EARPF; and
- (ii) The subprojects or components or subcomponents involving rehabilitation or social infrastructure such as roads and water supply schemes will be undertaken within the existing rights-of-way, and any losses associated with land acquisition or resettlement will be adequately compensated.

#### **F. Environmental Assessment and Review Procedures Framework**

29. The EARPF was prepared to facilitate appropriate levels of environmental management, which will include among other things preparation of IEEs/summary IEEs for all the subprojects likely to have adverse, though minor, environmental impacts. In addition, the EARPF identifies (i) the requirement for all subprojects of all project components to undergo environmental assessment; (ii) specific procedure of environmental assessment of subprojects indicating responsibilities and authorities; (iii) environmental criteria for subproject selection during implementation; and (iv) the staffing requirement and cost estimates for preparing IEEs, compliance with recommendations in the IEEs and the EMPs, and capacity building for concerned agencies. More specifically, the IEEs of the two sample subprojects will serve as models in preparing the IEEs/summary IEEs for the remaining subprojects during implementation. Detailed environmental assessment and the IEEs of the sample subprojects are in Supplementary Appendix C.