# **Project Administration Manual**

Project Number: 49038-001 Loan and Technical Assistance Numbers: {LXXXX; TAXXXX} June 2015

Islamic Republic of Pakistan: Flood Emergency Reconstruction and Resilience Project

#### **Project Administration Manual Purpose and Process**

The project administration manual (PAM) describes the essential administrative and management requirements to implement the project on time, within budget, and in accordance with Government and Asian Development Bank (ADB) policies and procedures. The PAM should include references to all available templates and instructions either through linkages to relevant URLs or directly incorporated in the PAM.

The executing and implementing agencies are wholly responsible for the implementation of ADB financed projects, as agreed jointly between the borrower and ADB, and in accordance with Government and ADB's policies and procedures. ADB staff is responsible to support implementation including compliance by executing and implementing agencies of their obligations and responsibilities for project implementation in accordance with ADB's policies and procedures.

At Loan Negotiations the borrower and ADB shall agree to the PAM and ensure consistency with the Loan and Project agreements. Such agreement shall be reflected in the minutes of the Loan Negotiations. In the event of any discrepancy or contradiction between the PAM and the Loan and Project Agreements, the provisions of the Loan and Project Agreements shall prevail.

After ADB Board approval of the project's report and recommendations of the President (RRP) changes in implementation arrangements are subject to agreement and approval pursuant to relevant Government and ADB administrative procedures (including the Project Administration Instructions) and upon such approval they will be subsequently incorporated in the PAM.

### ABBREVIATIONS

AFS=audited financial statementsCCC=Climate Change CellCDR=call-deposit receiptCDWP=Central Development Working PartyC&W=Communication and Works DepartmentDDMA=District Disaster Managemeth AuthorityDFFW=department of forestery, fisheries, and wildlifeDMF=design and monitoring frameworkDRM=disaster risk managementEA=executing agencyEARF=environmental impact assessmentESU=environment and social unitGoPb=Government of PunjabIA=implementing agencyICB=international competitive biddingIEE=initial environmental examinationLARF=land acquisition and resettlementLARF=land acquisition and resettlement planLIBOR=London interbank offered rateMHVRA=multi-hazard vulnerability and risk assessmentNCB=national Disaster Management AuthorityPAM=project coordination unitPAM=Provincial Disaster Management AuthorityPCU=project coordination unitPMA=Provincial Disaster Management AuthorityPDA=Provincial Disaster Management AuthorityPCU=project administration departmentPBDA=Provincial Disaster Management AuthorityPDI=<	ADB	=	Asian Development Bank
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SOE=Standard operating procedureSOP=Standard operating procedures	SEA	=	Safety Evaluation Authority
SOP = Standard operating procedures	SOE	=	Standard operating procedure
	SOP	=	Standard operating procedures
SPS = Safequard Policy Statement	SPS	=	Safequard Policy Statement
SSEMP = site specific environmental management plan	SSEMP	=	site specific environmental management plan
SSS = Single Source Selection	SSS	=	Single Source Selection
TOR = terms of reference	TOR	=	terms of reference

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#### I. PROJECT DESCRIPTION

1. The project will contribute to the economic and social recovery of flood-affected areas in Punjab Province and other flood-affected districts through the rehabilitation and reconstruction of high-priority infrastructure damaged and weakened during the floods in September 2014. The project focuses on the transitional phase of the emergency response for the rehabilitation and reconstruction of priority roads, bridges, irrigation and flood protection infrastructure damaged by the floods. Providing financing for the most urgently needed works, the loan and grant will enable the Government to redirect its own financing to housing and livelihood cash grants for the most vulnerable groups, thus restoring the economic activity essential to their survival. The project will also support ex ante disaster risk management (DRM) capacity building to mainstream resilience in development planning. Reconstruction of damaged and at-risk infrastructure in the flood-affected areas will use appropriate and cost-effective multi-hazard resistant design and construction standards to mitigate the potential impact of future disasters. The Project's design is based on the findings of the damage assessment reports prepared by the districts of Haveli, Kotli and Poonch and Punjab Planning and Development Departments (P&D) in January 2015 and facilitated by the Asian Development Bank (ADB) and World Bank. in close coordination with the federal government and other donors.

2. The impact of the project is the economic and social recovery from the 2014 floods. The project outcome is the restoration and reconstruction of critical public and social infrastructure to multi-hazard resilience standards.

3. The project will address immediate losses to priority assets and restore capacity and productivity, rather than providing relief or comprehensive reconstruction. The priority infrastructure included in the project scope is a lifeline for livelihoods and socio-economic activity of the affected population before the floods and is critical for sustaining the next flood season The project will adopt a systematic approach to disaster management, by focusing on institutional capacities for disaster vulnerability and risk assessment, mainstreaming DRM in the development planning process and post-conflict reconstruction. This will be achieved in close partnerships with key national and international stakeholders to pool resources and maximize synergies for effective emergency aid. The project outputs include the following:

- (i) Output 1: Rehabilitation and reconstruction of flood damaged roads and bridges in Punjab and the districtsof Haveli, Kotli and Poonch. The component will focus on rehabilitation/reconstruction of provincial or major arterial roads (or its segments), repair works (to pre-flood standard) of other major roads, reconstruction of damaged district roads, and reconstruction (to improved or preflood standard, as applicable) of partially and completely damaged bridges to multi-hazard resistant standards wherever required. The list of roads and bridges schemes is provided in Annex 1.
- (ii) Output 2: Flood resilient irrigation and flood management infrastructure in Punjab Province. The component will focus on the reconstruction and upgrading of damaged irrigation, drainage and flood protection schemes, including upgrading of priority flood protection schemes in the flood affected districts of Punjab to multi-hazard resilience standards. The list of irrigation and flood management schemes is provided in Annex 2; and

(iii) Output 3: Strengthened disaster risk management through: (a) human and institutional capacity development and strengthening DRM interface with the districts (downward) and other mandated institutions; (b) Multi-hazard risk assessment data and system development; and (c) piloting subprojects for mitigation and adaptation. The overall analysis and scope of the DRM component is provided in Annex 3.

4. Selection criteria will guide the final identification of schemes/sub-projects to be financed by the project. The following general criteria would be used in selecting and prioritizing the subprojects:

- (i) The subproject's are located within the flood affected area, as identified through meteorological data, inundation maps, and other information recorded by the relevant government departments during the rains and consequent floods;
- (ii) The subproject is technically feasible and the proposed intervention provides the most cost effective solution, and where appropriate is economically viable based on the economic analysis;
- (iii) The subproject will be completed within the project implementation period (three years);
- (iv) Contract packaging for the subprojects will be formulated accordingly and will be subject to prior approval by ADB;
- (v) Where relevant, the design of subprojects proposed for reconstruction represents a least-cost alternative with appropriate adjustment for incorporating multi-hazard resistant design standards, as applicable under the relevant provincial or national standards;
- (vi) The subprojects will be prepared by the relevant IAs, approved by the respective departmental committees, and subject to ADB's prior or post approval in accordance with this PAM;
- (vii) The subprojects shall be (a) in compliance with applicable laws and ADB's Safeguard Policy Statement (SPS) (2009); and (b) prepared in accordance with the requirements of an agreed environmental assessment and review framework (EARF) and the Land Acquisition and Resettlement Framework (LARF). For subprojects requiring an initial environmental examination (IEE) or environmental impact assessment (EIA), the IEE/EIA as applicable will be prepared and included in the subprojects' proposal and disclosed according to the EARF. Government environment clearance, if required, will be obtained prior to commencing civil works for such subprojects. Subprojects that do not satisfy the EARF and LARF will not be included under the FERRP;
- (viii) All subprojects also need to (a) be in compliance with applicable national and provincial land acquisition and resettlement laws as well as ADB's SPS, (b) avoid land acquisition and resettlement, to the maximum extent possible; If land acquisition and resettlement cannot be avoided, subprojects should include measures that minimize impacts, using unencumbered government land which has not been

squatted upon and (c) will have no impacts on indigenous people. The subprojects need to comply with the LARF;

- (ix) The subprojects will not be financed by another ADB project or by any other external source unless ADB agrees to be a co-financier; and
- (x) Subprojects for retroactive financing will not involve any land acquisition, environmental impacts or resettlement.

5. In addition to the above general criteria, pilot DRM intervention for slide stabilization on major roads will be prioritized using the following criterion:

- a) Slides that are located on roads that are being reconstructed under the project will have first preference
- b) Slides located in sections, that affect the road and also threaten adjoining population, and at the same time can be stabilized using only biological engineering measures will be given higher priority.
- c) Biological stabilization measures for slides will be identified for the whole lengths of roads included in the project scope, rather than isolated reaches.
- d) The design and scope of biological measures for each road for slide stabilization will be discussed and agreed with roads PIU and approved by the steering committee as a package, before starting any intervention.
- e) For slides that also need engineering intervention, work will not start till the scope of the engineering intervention has been agreed and approved by the steering committee.
- f) Slides along roads that have highest traffic volumes will have priority; and
- g) Only those slide stabilization activities should be selected that can be completed within the project implementation period (3 years).

6. The intervention proposed under slide stabilization program should not adversely impact local population and property and should be (a) in compliance with applicable laws and ADB Safeguard Policy Statement (2009); (b) prepared in compliance with applicable national and provincial laws; (c) avoid land acquisition, but if land acquisition and resettlement cannot be avoided, minimize impacts, using unencumbered government land which has not been squatted upon or works within the existing Right of Way; and (d) and if land acquisition and resettlement is required, comply with the Land Acquisition and Indigenous Peoples Framework.

#### II. IMPLEMENTATION PLANS

#### A. FERRP Project Readiness Activities

Months												
Indicative Activities	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Who responsible
Advance contracting actions												P&D, C&W, PID, PDMA
Retroactive financing actions												C&W and PID (Punjab)
Establish project implementation arrangements												P&D, C&W, PID, PDMA
PC-1 Approval												PC
ADB Board approval												ADB
Loan signing												ADB, EAD
Government legal opinion provided												EAD
Government budget inclusion												P&D
Loan effectiveness												ADB

ADB=Asian Development Bank; C&W=Communication and Works Department; EAD=Economic Affairs Division; FERRP=Flood Emergency Reconstruction and Resilience Project; P&DDs=Planning and Development Departments; PC=Planning Commission; PDMA=provincial disaster management authority, Punjab; PID=Provincial Irrigation Department, Punjab.

# B. Overall Project Implementation Plan

Activities		2015			2016				2017				2018		
		Q-3	Q-4	Q-1	Q-2	Q-3	Q-4	Q-1	Q-2	Q-3	Q-4	Q-1	Q-2	Q-3	Q-4
A. DMF															
Output1: Reconstruction of flood-damaged roads and bridges															
Output2: Flood resilient irrigation and flood management infrastructure															
Output3: Strengthened disaster risk management															
B. Management Activities															
PCU/PIUs established and fully staffed															
Recruitment of Project Management, and Design and Construction Supervision Consultants															
Procurement of vehicles and project equipment															
EARF/LARP implementation															
Gender Action Plan key activities															
Communication Strategy key activities															
Mid-Term Review															
Project Completion Report															

# III. PROJECT MANAGEMENT ARRANGEMENTS

Project implementation organizations	Management Roles and Responsibilities
Project Steering Committees	• Oversee progress and provide guidance on the FERRP. Meet twice per year, with additional meetings as needed.
Ministry of Kashmir Affairs and Gilgit Baltistan	<ul> <li>Ensure inclusion of counterpart funding rquest in the annual budget and timely provision of counterpart funds for project activities.</li> <li>Oversee implementation of the project in Haveli, Kotli and</li> </ul>
Planning and Development Department for the districts of Haveli, Kotli and Poonch through the Project Coordination Unit (PCU)	<ul> <li>Establishment and staffing of PCU within the P&amp;D, headed by a Director General, supported by staff deputed from C&amp;W, Irrigation, Land Use Planning, Forestry and SDMA. The PCU will have overall responsibility for planning, coordination, monitoring, overall reporting and approval of subprojects and activities according to the selection criteria, relating to disaster risk management support; and provincial and districts roads.</li> <li>Implementation of all activities related to establishment and operation of the Climate Change Cell (CCC) within the P&amp;DD.</li> </ul>
	<ul> <li>Recruitment and supervision of individual consultants for climate change cell and the Forest Department.</li> <li>Oversee the Forest Department's work on bio-engineering treatment of landslides.</li> <li>Maintain all project accounts, and accurate records of both financial and physical progress with regards to all project components.</li> <li>Provide to the Asian Development Bank (ADB) in a timely manner quarterly and annual reports including annual financial statements duly audited as per the Loan Agreement.</li> <li>Carry out monitoring and evaluation regularly and on time.</li> <li>Operate imprest account</li> <li>Processing of eligible payments related to activities of the PCU and CCC.</li> <li>Ensure that the subprojects proposals are compliant to environmental and social safeguard requirements of ADB</li> </ul>
Planning and Development Department, Punjab, through the Project Coordination Unit (PCU)	<ul> <li>Recruit and supervise all incremental staff for PCU as well as data clearing house in P&amp;D.</li> <li>Procure computer hardware, software and other equipment.</li> <li>Establish and staff PCU within the Pⅅ, headed by a Project Coordinator.</li> <li>The PCU will have overall responsibility for planning, coordination, monitoring, overall reporting and approval of subprojects and activities according to the selection criteria, relating to disaster risk management support; and Irrigation infrastructure, and provincial and districts roads in Punjab.</li> </ul>

# A. Project Implementation Organizations–Roles and Responsibilities

Project implementation organizations	Management Roles and Responsibilities
	<ul> <li>Operate imprest account</li> <li>Processing of eligible payments related to activities of the PCU and data clearing house.</li> <li>Ensure that the subprojects proposals are compliant to environmental and social safeguard requirements of ADB</li> <li>Establish a data clearing house within the Pⅅ for interfacing of the GIS-based database generated at DDMA as well as PDMA and linking it with all relevant line departments with the advice to use it as a planning tool so that the DRM can be mainstreamed in the development cycle.</li> <li>The data clearing house of Pⅅ will ensure that all information gathered, and mapped under the project is available through its servers to all concerned line departments through conventional or virtual private networking (as appropriate)</li> <li>Operate data clearing house and its maintenance</li> <li>Develop and standardized the MHVRA methodology and follow its implementation</li> <li>Acquire regular data from DDMAs taken from Android smart phone and update database</li> <li>Develop MHVRA maps and digital data records</li> <li>Regular update of MHVRA data in the data clearing house</li> <li>Maintain all project accounts, and accurate records of both financial and physical progress with regards to all project components.</li> <li>Provide to the Asian Development Bank (ADB) in a timely manner quarterly and annual reports including annual financial statements duly audited as per the Loan</li> </ul>
	<ul> <li>Agreement.</li> <li>Carry out monitoring and evaluation regularly and on time.</li> </ul>
Communication and Works Department, Punjab Province	<ul> <li>Prepare, implement, and monitor safeguards in accordance with the LARF and EARF, ADB's SPS, Loan Agreement and the Project Agreements.</li> <li>Establish a grievance redress mechanism.</li> <li>Recruit and supervise consultants.</li> <li>Maintain all project accounts, and accurate records of both financial and physical progress with regards to all project components.</li> <li>Procure civil works.</li> <li>Supervise execution of civil works and payments to contractors.</li> <li>Operate imprest account.</li> <li>Provide to ADB in a timely manner quarterly and annual reports including audited financial statements duly audited as per the loan agreement.</li> <li>Carry out monitoring and evaluation regularly and on time.</li> </ul>

information.
Conduct spot checks for physical verification of safeguards compliance and complete checklists for each subproject.

Project implementation organizations	Management Roles and Responsibilities
Communication and Works Department for the districts of Haveli, Kotli and Poonch	<ul> <li>Prepare, implement, and monitor safeguards in accordance with the LARF and EARF, ADB's SPS, Loan Agreement and the Project Agreements.</li> <li>Establish a grievance redress mechanism.</li> <li>Recruit and supervise consultants.</li> <li>Maintain all project accounts, and accurate records of both financial and physical progress with regards to all project components.</li> <li>Procure civil works.</li> <li>Supervise execution of civil works and payments to contractors.</li> <li>Operate imprest account.</li> <li>Provide to ADB in a timely manner quarterly and annual reports including audited financial statements duly audited as per the loan agreement.</li> <li>Carry out monitoring and evaluation regularly and on time.</li> <li>Disseminate and publish procurements and contracts related information.</li> <li>Conduct spot checks for physical verification of safeguards compliance and complete checklists for each subproject.</li> </ul>
Provincial Irrigation Department, Punjab	<ul> <li>Procure and supervise civil works.</li> <li>Payments to suppliers and contractor .</li> <li>Operate imprest account.</li> <li>Recruit and supervise construction supervision consultants</li> <li>Maintain all project accounts, and accurate records of both financial and physical progress with regards to all project components.</li> <li>Provide to ADB in a timely manner quarterly and annual reports including audited financial statements duly audited as per the loan agreement.</li> <li>Conduct spot checks for physical verification of safeguards compliance and complete checklists for each subproject.</li> <li>Carry out monitoring and evaluation regularly and on time.</li> <li>Disseminate and publish procurements and contracts related information.</li> <li>Recruit and supervise Consultants for development of standard operating procedures (SOP) for inspection of irrigation and floods protection infrastructure.</li> <li>Procure the inspection equipment for Safety Evaluation Authority.</li> <li>Get the SOPs developed for inspection of irrigation and flood protection infrastructure and ensure that they are being followed religiously.</li> </ul>
Provincial Disaster Management Authority, Punjab	<ul> <li>Recruit Consultants and incremental staff on a competitive basis and oversee their work.</li> <li>Recruit Managers (Survey Supervisors) and Surveyors for conducing household level survey.</li> <li>Develop specifications for procurement of computer hardware and software for PDMA HQ, and DDMA in 16</li> </ul>

Project implementation organizations	Management Roles and Responsibilities
	<ul> <li>districts for development, and deployment of GIS-based hazard mapping database and its integration and interfacing with Pⅅ</li> <li>Under take MHRVA in 20 Project districts</li> <li>Quality assurance and quality check for MHVRA project.</li> <li>Acquire all digital and hard copies of the MHVRA studies and maintain its record.</li> <li>Payments to suppliers and service providers</li> <li>Open and Operate imprest account as per ADB Handbook on Loan Disbursement.</li> <li>Develop MHVRA maps and digital data records</li> <li>Maintain all project accounts, and accurate records of both financial and physical progress with regards to all project components.</li> <li>Provide to ADB in a timely manner quarterly and annual reports including audited financial statements duly audited as per the loan agreement.</li> <li>Disseminate and publish procurements and contracts related information.</li> <li>Hazard profiling of the Project districts based on the seismic and spatial data collection, hi-res satellite imageries, and prepare various hazard maps.</li> <li>Organize training on MHRVA and DRM using the toolkit developed for this purpose by the Project Consultants.</li> <li>Develop project performance monitoring system for PDMA</li> <li>process modeling and designing of a spatial solution for PDMA.</li> <li>Close coordination with Pⅅ Punjab for integration and interfacing of the GIS application developed under the Project with P&amp;DD.</li> </ul>
District Disaster Management Authority	<ul> <li>Maintain all project accounts, and accurate records of both financial and physical progress of the project activities.</li> <li>Design data collection tools including an android based data form</li> <li>Field testing and use of sampling techniques for survey</li> <li>Plan and undertake field surveys for household level data collection in sixteen districts</li> <li>Establish, and maintain a distributed database that will be accessible by PDMA as well as PunjabPⅅ through conventional networking and/or virtual private network.</li> </ul>
Climate Change Cell, within the P&D for the districts of Haveli, Kotli and Poonch	<ul> <li>Develop Climate Change Strategy and Action Plan</li> <li>Facilitate and strengthen networking and partnership with national and regional climate change organizations.</li> <li>Facilitate and support the undertaking of Climate Variability Risk and Vulnerability Assessment and mainstream climate risks in local planning and budgeting processes.</li> </ul>

• Capture and document evidence for climate resilience lessons from other areas and provide policy

Project implementation organizations	Management Roles and Responsibilities
34	recommendations and advocate for policy change.
	• Develop a web-based information storage mechanism for all
	relevant climate risk documentation, for easy access and sharing; support resource mobilization for the development of a climate risk Management Information System.
	• Establish and facilitate an inter-sectoral framework/platform
	<ul> <li>for integrating climate change into sectoral planning.</li> <li>Contribute meaningfully to the Second National Communication (SNC) undertakings by Federal Ministry of Climate Change.</li> <li>Support the development of a climate change knowledge</li> </ul>
	sharing platform and facilitate a vibrant multi-stakeholder
	<ul> <li>exchange and learning process.</li> <li>Develop an overarching climate change action plan for facilitating the implementation of National Climate Change Deliver with a primary facult and the rate.</li> </ul>
	<ul> <li>Policy, with a primary focus on the role of Local Administrations in improving climate resilience capacity and sustainable climate resilient small scale infrastructure.</li> <li>Support organization of national events and targeted workshops for awareness creation and advocacy on the importance of mainstreaming climate risks into local strategies, policies and plans.</li> </ul>
	Undertake policy gaps analysis of the current policies with a view to identify entry points for mainstreaming climate resilient infrastructural designing, planning, and implementation
	<ul> <li>Support sectoral Ministries and departments with analysis of sector strategies, policies and plans and provide recommendations for mainstreaming climate risks into policy and planning frameworks.</li> </ul>
	• Develop CCC capacity first and then assist other departments to develop climate change relevant projects which can attract international climate financing.
	<ul> <li>Collaborate closely with the national and International Climate Change Institutions, governments as well as private institutions.</li> </ul>
	• Play the role of climate change focal point, and provide technical support to the Additional Chief Secretary (Development).
	• Guide the government particularly SDMA on precautionary measures to anticipate, prevent or minimize the adverse impacts and causes of climate change.
	• Promote and assist in the development, use and diffusion, including transfer of technologies that control or reduce GHG emissions in all the relevant sectors including energy, industries, transport, agriculture, waste management and forestry.
	<ul> <li>Plan and hold workshops, seminars, and discussion forums on climate change</li> </ul>

on climate change.
Provide relevant staff of CCC with opportunities to national as well as international trainings on Climate Change.

Project implementation organizations	Management Roles and Responsibilities
	Undertake an aggressive awareness campaign on the climate change through electronic as well as print media.
Forest Department for Haveli, Kotli and Poonch districts	<ul> <li>Detail landslide inventory.</li> <li>Prepare, implement, and monitor the bio-engineering treatment plan for landslides in the districtsof Haveli, Kotli and Poonch.</li> <li>Maintain adequate record of expenditure made under the Project.</li> <li>Provide to ADB in a timely manner quarterly and annual reports including audited financial statements duly audited as per the loan agreement.</li> <li>Carry out monitoring and evaluation regularly and on time.</li> <li>Impart social forestry and related training to 3,000 community members.</li> </ul>
Asian Development Bank	<ul> <li>Provide technical and financial support and oversight in accordance with loan agreement.</li> <li>Provide guidance and assistance to EAs/IAs/PCUs/PIUs throughout project implementation to ensure smooth and timely implementation of the project in accordance with the Loan and Project Agreements.</li> <li>Review all documents that require ADB approval.</li> <li>Conduct requisite loan review missions, including mid-term review and project completion missions.</li> <li>Monitor compliance with loan covenants, social and environmental safeguards and technical and financial requirements.</li> <li>Ensure timely processing of withdrawal applications and release eligible funds.</li> <li>Review audit reports and ensure compliance with financial audit recommendations.</li> <li>Review project performance reports and provide advice and guidance to EAs/IAs/PCUs/PIUs, as required.</li> <li>Update eOps and comply with ADB disclosure requirements.</li> </ul>
B. Key Persons Involved inImplementation ExecutingAgencies	
Planning and Development Department for Haveli, Kotli and Poonch districts	Dr. Tashfeen Khan Additional Chief Secretary (Dev) + 92 5822 921396 Planning & Development Department Kashmir Plan House, Block 11 Civil Secretariat Complex, Muzaffarabad
Planning and Development Department, Punjab Province	Mr. Muhammad Irfan Elahi Chairman, Planning and Development Board +92 42 9210002 & 4 chairmanpnd@gmail.com Planning & Development Board Government of the Punjab

Project implementation organizations	Management Roles and Responsibilities					
	Civil Secretariat, Lahore					
Asian Development Bank						
Pakistan Resident Mission	Werner Liepach					
	Country Director					
	051-2087300					
	wliepach@adb.org					
Mission Leaders	Donneth A. Walton					
	Principal Natural Resources and Agriculture Specialist					
	051-2087300					
	dwalton@adb.org					
	M. Shaukat Shafi					
	Senior Project Officer					
	051-2087300					
	mshafi@adb.org					

#### C. Project Organization Structure



# **Detailed Project Implementation Arrangements**

# (i) Haveli, Kotli and Poonch Districts

7. The P&D will be the overall Executing Agency (EA) for the portion of the project that will be implemented in the flood-affected districts of Haveli, Kotli and Poonch. It will also be the implementing agency (IA) for the DRM strengthening component. The other IA will be the C&W Department for reconstruction of the roads (and bridges) component, and would also be responsible for the respective cash-for-work efforts linked to the roads and bridges reconstruction, and surveys and landslides works that they undertake in their respective components. The Forest department will be IA for the DRM pilot projects for bio-engineeringinterventions on slides along major corridors including the roads included in the project scope.

8. The EA will establish a project steering committee (PSC) to provide policy direction and strategic oversight, and inter-agency coordination. The PSC will meet at least quarterly, to review implementation performance, approve annual plans and advise on policy level actions. The proposed composition of the steering committee is provided below:

#### Steering Committee

- Additional Chief Secretary, Planning and Development (Chair of the Steering Committee)
- Joint Secretary, Economic Affairs Division
- Joint Secretary, Planning Commission
- Joint Secretary, Ministry of Kashmir Affairs and Gilgit Baltistan
- Secretary, Communication and Works Department
- Secretary, Irrigation Department
- Secretary Forest, Wildlife and Fisheries Department
- Secretary, Finance Department
- Director General, Disaster Management Authority
- Director Land Use Planning Unit
- Project Coordinator of the Project, Planning and Development Department (also serves as secretary of the Steering Committee).

9. A project coordination unit (PCU) will be established that will have two distinct functions – one as an EA and one as an IA. As an EA it will have the overall responsibility for planning, coordination, monitoring, overall reporting and approval of subprojects and activities according to the selection criteria, relating to disaster risk management support; and provincial and districts roads. The PCU in the P&D will be headed by a dedicated Director General, supported by staff deputed from C&W, Irrigation, Land Use Planning, Forestry and SDMA.

10. The implementation arrangement at the IA level will use the existing capacities of the respective IA's as much as possible. The C&W will establish a lean Project Implementation Unit (PIU) headed by a full-time Project Director from existing staff, supported by dedicated core staff responsible for coordination, financial control, record keeping, payments, procurements, safeguards and reporting. The IA will sign the work and supply contracts related to their area of responsibility and will be responsible for implementation, contract administration and payment certification, supported by third party resident or top supervision consultants hired by the PIU. The PCU at the P&D as an IA will implement the DRM component focused on establishing a climate change unit in P&D, and supporting climate change awareness, capacity building and

planning. The IA for pilot mitigation and adaptation activities will be department of forestery, fisheries, and wildlife (DFFW). The DFFW will undertake bio-engineering interventions like plantations, pitching and drainage measures on slides along major corridors including the roads included in the project scope in districts of Haveli, Kotli and Poonch. The IA will not have any separate PIU or imprest account. It will use Force Account procedures to charge for its services. Verfiable inputs, outputs and charging parameters for the services that DFFW provides through forced account will be agreed during the first month of project implementation.

11. The PCU dedicated core staff members responsible for coordination, financial control, record keeping, payments, procurements, safeguards, and reporting will also support its role as an IA. All PIUs will be supported by a part-time/full-time staff provided through dedicated TA attached to the project in areas of procurement, financial control and safeguards. Separate imprest accounts will be opened and maintained by the (P&D), and C&W with the National Bank of Pakistan (NBP). The P&D will reimburse the DFFW, based on verified outputs that they achieve.

12. The implementing agency (IA) through the PIU will undertake the subproject review based on the subproject selection criteria and submit it for the approval of the steering committees. After approval, the list of all such subprojects will be submitted to ADB for post review in case of subprojects below \$1 million and prior review for all subprojects above \$1 million. The selection of the first two subprojects of each IA, irrespective of the cost, approved by the respective committees will be subject to prior review and concurrence by ADB before commencement of works. ADB will undertake periodic review of the selected or all subprojects if required during review missions or through specially hired third party consultants under a technical assistance (TA) attached to the loan. The following tables present the proposed composition of the PCU and PIUs:

#### **Planning and Development Department – CPU**

Title	No. of Positions
Director General/Project Coordinator (existing P&D staff – BS 20)	1
Senior Chief Climate Change (project Coordinator - BS-20)	1
Climate Change (Adaptation) Consultant (BS-19)	1
Carbon Credit Consultant (BS-19)	1
Deputy Director Finance and Administration	1
Deputy Director M&E	1
Procurement specialist (to be provided by ADB TA)	1
Assistant Director Accounts	1
Research Officer or Assistant Director	3

#### **Communication and Works Department – PIU**

Title	No. of Positions
Project Director (Existing Chief Engineer from C&W)	1
Deputy Directors for (Procurement, Contract Administration, M&E)	4
Deputy Director Finance and Administration	1
Assistant Director	8
Transport Specialist*	1
Monitoring & Evaluation Specialist*	1
Financial Management Specialist*	1
Procurement and Contract Administration Specialist*	1
Safeguard Specialist*	1

\*To be financed from the associated TA.

#### (ii) Punjab Province

13. The Planning and Development Department (P&D) of the Government of Punjab (GoPb) will be the Executing Agency (EA) for the project, and the implementing agencies (IAs) for DRM subcomponent related to its role as data clearing house. The other IAs are the PID for the irrigation, drainage, and DRM subcomponent on flood risk management; C&W for provincial and district roads; and PDMA for DRM capacity building, assessment and planning support subcomponent. The EA will establish a project steering committee (PSC) to provide policy direction and strategic oversight, and inter-agency coordination. The PSC will meet at least quarterly, to review implementation performance, approve annual plans and advise on policy level actions. The proposed composition of the steering committee is provided below:

#### **Steering Committee**

- Chairman, Planning and Development Board (Chair of the Steering Committee)
- Joint Secretary, Economic Affairs Division
- Joint Secretary, Planning Commission
- Secretary, Communication and Works Department
- Secretary, Irrigation Department
- Secretary, Finance Department
- Member Infrastructure, Planning and Development Department (also serves as Secretary of the Steering Committee)
- Director General, Provincial Disaster Management Authority
- Chief Executive Officer of the Urban Unit

14. The P&D will have the overall responsibility for planning, monitoring, project progress review, coordinating with line departments/agencies and the Federal Government for approval of the umbrella project by the Central Development Working Party (CDWP). The Project Coordination Unit (PCU) at the P&D will be headed by the Member Infrastructure, supported by existing Chief of section related to irrigation and roads. However, Chief DRM responsibilities will be carried out by the Chief, Irrigation until a Chief DRM position can be established. The approval of subprojects and related activities according to the selection criteria relating in each sector will be the responsibility of competent approval forum, at the department, provincial and federal level.

15. The P&D will also be responsible for the implementation of the DRM subcomponent 1, related to: (i) establishing data management and clearing centers P&D (data clearing house) and procuring the necessary technical hardware, equipment and furniture; and (ii) capacitydevelopment to mainstream DRM outputs in the planning process. The PID and C&W will establish a lean Project Implementation Unit (PIU) headed by a full-time Project Director, supported by dedicated core staff responsible for coordination, financial control, record keeping, payments, procurements, safeguards and reporting. Wherever capacity exists in the field formations the existing field formation of these departments through the Executive Engineers and District Officers in the affected highway division/districts/irrigation canal divisions will sign the work and supply contracts related to their area of responsibility and will be responsible for implementation, contract administration and payment certification, with third party resident or top supervision hired by the PIU. The PIU at the PDMA will have 4 existing staff members heading by the existing director general and supported by incremental staff hired under the project. As the incremental staff to be hired though the project in PDMA is required on long term basis the same staff will be regularized within PDMA structure during project implementation. All PIUs will be supported by staff provided through dedicated TA attached to the project in areas of procurement, financial control and safeguards. In addition the PIU will be supported by shortterm individual consultants in specific areas and sector where long term and sustained capacities are not required in PDMA operations. Separate imprest accounts will be opened and maintained by the P&D, PID, C&W and PDMA with the NBP.

16. The implementing agency (IA) through the PIU will undertake the subproject review based on the sector selection criteria and submit it for the approval of the departmental committees. After approval, the list of all such subprojects will be submitted to ADB for prior review. The prior review requirement will not apply to emergency works procured using emergency procedures of Punjab Procurement Rules (PbPRA) 2014 that are being retroactively financed. ADB will undertake periodic review of the selected or all subprojects if required during review missions or through specially hired third party consultants under an associated technical assistance (TA) to help with loan implementation.

17. The following tables present proposed composition of the PCU and PIUs:

Title	No. of Positions
Member Infrastructure Development (Project Director)	1
Director General M&E (Deputy Project Coordinator)	1
Chief Irrigation (existing)	1
Chief C&W (existing)	1
Director Monitoring & Evaluation (existing)	1
Project Coordinator*	1
Deputy Director Administration and Finance*	1
Deputy Director Accounts*	1
Deputy Director Monitoring and Evaluation*	1
Deputy Director Disaster Risk Management*	1
Procurement and Contract Management Specialista	1
Planning Officers (existing)*	4
Safeguards Specialista	1
Gender Specialista	1
GIS Expert*	1
GIS Expert	1
Developer Team Lead	1
Developer	2
Database Analyst	1
Network Analyst	1
IT Support Staff	3

#### Planning and Development Department – PCU

#### Irrigation Department -- PIU

Title	No. of Positions
Project Director	1
Superintendent Engineer (Flood Risk Management)	1
Director, Finance and Accounts	1
Deputy Director Procurement and Contract Administration	2
Assistant Director*	4
Monitoring & Evaluation Specialist*	1
Deputy Director, Finance and Accounts/Divisional Accounts Officer*	1
Procurement Specialist*	1
Safeguards Specialist*	1

<sup>a</sup>To be financed from the TA; \*to be financed from the loan.

PIU in the PDMA	PIU	in	the	PD	MA	1
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Incremental Staff	No. of Positions
Project Director (Director General, PDMA)	1
Delputy Project Director	1
Director Procurement and Contract Administration (existing Director)	1
Financial Manager (Existing Director Finance PDMA)	1
Assistant Director Coordination/focal point (existing)	1
Team Leader (GIS)	1
GIS/RS Expert	1
GIS Developer	3
Data Analyst	6
DRR Expert	1
DBA	1
Monitoring and Evaluation	1
Content Developer	1
MIS Specialist	1
Network Administrator	1
District Managers	20
Surveyors (4 for each district)	64

Communication and Works Department PIU									
Title	No. of Positions								
Project Director (Existing Chief Engineer -DSM)	1								
Deputy Director, Administration and Works	1								
Deputy Director Procurement and Contract Administration	2								
Deputy Director Finance and Accounts	1								
Assistant Director/SDO	4								
Monitoring & Evaluation Specialist*	1								
Financial Management Specialist*	1								
Procurement and Contract Administration Specialist*	2								
Safeguard Specialist*	1								

\*To be financed from TA. Note: Existing Executive District Officers / Deputy District Officers (Roads) in the affected districts will be responsible for contract administration and payment certification.

### IV. COSTS AND FINANCING

# A. Detailed Cost Estimates by Expenditure Category

Iter	n		Foreign Exchange	Local Currency	Total Cost	% of Total Base Cost
Α.	Ρι	unjab Roads Component				
	1	Civil Works	-	79.49	79.49	32.8%
	2	Equipment and Vehicle	-	0.69	0.69	0.3%
	3	Consultants	-	3.24	3.24	1.3%
		a. Project Management	-	3.11	3.11	1.3%
		b. Capacity Building	-	0.13	0.13	0.1%
	4	Incremental Administrative Cost	-	1.45	1.45	0.6%
		Subtotal (A)	-	84.88	84.88	35.0%
В.	Ρι	unjab Irrigation Component				
	1	Civil Works	-	53.16	53.16	21.9%
	2	Equipment and Vehicle	-	0.42	0.42	0.2%
	3	Consultants	-	2.09	2.09	0.9%
		a. Project Management	-	2.01	2.01	0.8%
		b. Capacity Building	-	0.08	0.08	0.0%
	4	Incremental Administrative Cost	-	1.22	1.22	0.5%
		Subtotal (B)	-	56.89	56.89	23.5%
C.	Ρι	unjab DRM (Irrigation)				
	1	Civil Works	-	-	-	0.0%
	2	Equipment and Vehicle	0.91	-	0.91	0.4%
	3	Consultants	0.39	0.14	0.53	0.2%
		a. Project Management	0.21	0.14	0.35	0.1%
		b. Capacity Building	0.18	-	0.18	0.1%
	4	Incremental Administrative Cost	-	0.01	0.01	0.0%
		Subtotal (C)	1.30	0.15	1.45	0.6%
D.	Ρι	unjab DRM (PDMA)				
	1	Civil Works	-	-	-	0.0%
	2	Equipment and Vehicle	-	0.75	0.75	0.3%
	3	Consultants	-	0.40	0.40	0.2%
		a. Project Management	-	0.29	0.29	0.1%
		b. Capacity Building	-	0.11	0.11	0.0%
	4	Incremental Administrative Cost	-	4.37	4.37	1.8%
		Subtotal (D)	-	5.53	5.53	2.3%
Ε.	Ρι	unjab DRM (P&D)				
	1	Civil Works	-	-	-	0.0%
	2	Equipment and Vehicle	-	0.38	0.38	0.2%
	3	Consultants	-	0.02	0.02	0.0%
		a. Project Management	-	0.01	0.01	0.0%

lter	n		Foreign Exchange	Local Currency	Total Cost	% of Total Base Cost
		b. Capacity Building	-	0.00	0.00	0.0%
	4	Incremental Administrative Cost	-	1.31	1.31	0.5%
		Subtotal (E)	-	1.70	1.70	0.7%
F.	Ha	aveli, Kotli and Poonch districts Roads and				
	Br	idges				40.00/
	1		-	44.31	44.31	18.3%
	2	Equipment and Vehicle	-	0.26	0.26	0.1%
	3	Consultants	-	3.30	3.30	1.4%
		a. Project Management	-	3.30	3.30	1.4%
		b. Capacity Building	-	-	-	0.0%
	4	Incremental Administrative Cost	-	0.62	0.62	0.3%
C		Subtotal (F)	-	48.49	48.49	20.0%
G.	Ha	aveli, Kotli and Poonch districts DRM (P&D)				
	1	Civil Works	-	-	-	0.0%
	2	Equipment and Vehicle	0.19	-	0.19	0.1%
	3	Consultants	0.15	0.58	0.73	0.3%
		a. Project Management	0.09	0.33	0.42	0.2%
		b. Capacity Building	0.06	0.25	0.31	0.1%
	4	Incremental Administrative Cost	-	0.93	0.93	0.4%
		Subtotal (G)	0.34	1.51	1.85	0.8%
н.	Ha (F	aveli, Kotli and Poonch districts DRM orest)				
	1	Civil Works	-	5.27	5.27	2.2%
	2	Equipment and Vehicle	-	-	-	0.0%
	3	Consultants	-	-	-	0.0%
		a. Project Management	-	-	-	0.0%
		b. Capacity Building	-	-	-	0.0%
	4	Incremental Administrative Cost	-	-	-	0.0%
		Subtotal (H)	-	5.27	5.27	2.2%
		Total Base Cost	1.64	204.42	206.05	85.1%
I.	Сс	ontingencies				
	1	Physical	-	15.97	15.97	6.6%
		Price	-	11.96	11.96	4.9%
		Subtotal (I)	-	27.93	27.93	11.5%
J.	Fi	nancing Charges During Implementation				
	1	Interest During Implementation	-	7.80	7.80	3.2%
	2	Commitment Charges	-	0.49	0.49	0.2%
		Subtotal (J)	-	8.29	8.29	3.4%
Tot	al C	Cost (A-J)	1.64	240.63	242.27	100.0%

Number	ltem	Total Amoun ADB Fi (	t Allocated for nancing \$) Subcategory	Percentage and Basis for Withdrawal from the Loan
Humber	item	Galegory	Cubballegoly	Accounts
1	Works	164,010,649		
1A	Punjab Province Haveli Kotli Poonch		119,389,444	90% of total expenditure claimed 90% of total expenditure
1B	districts		44,621,205	claimed
2	Mechanical and Equipment	3,239,129		100% of total overanditure
2A	Punjab Province		2,837,459	claimed*
2B	districts		401,670	claimed*
3	Consulting Services	9,274,708		
3A	Project Management- Punjab Province Project Management		5,201,822	100% of total expenditure claimed*
3B	Haveli, Kotli, Poonch districts		3,347,486	100% of total expenditure claimed*
3C	Capacity Building-Punjab Province		447 750	100% of total expenditure claimed*
30	Capacity Building-Haveli,		277 650	100% of total expenditure
50	Incremental Management	0.000.050	211,000	Claimed
4	Costs	8,923,056		100% of total expenditure
4A	Punjab Province		7,527,305	claimed*
4B	districts		1,395,751	claimed*
5	Financing Charges During Implementation	8,289,123		100% of amount of due
6	Unallocated	24,303,334		
6A	Punjab Province		17,742,060	
6B	districts		6,561,274	
	Total	210 0	40.000	

#### B. Allocation and Withdrawal of Loan Proceeds

Total218,040,000\*exclusive of taxes and duties imposed within the territory of the Borrower.

# C. Detailed Cost Estimates by Financier

lten	n		A	DB (OCR) % of	Go	vernment % of	
			Amount	Cost	Amount	Cost	Total Cost
۸	Pi	iniah Roads Component	Amount	Calegoly	Amount	Category	0031
	1	Civil Works	71 54	90.0%	7 95	10.0%	79 49
	2	Equipment and Vehicle <sup>a</sup>	0.62	90.0%	-	0.0%	0.62
	3	Consultants <sup>a</sup>	2.92	90.0%	-	0.0%	2.92
	Ŭ	a Project Management	2.80	90.0%	-	0.0%	2.80
		b Capacity Building	0.11	90.0%	-	0.0%	0.11
	4	Incremental Administrative Cost <sup>a</sup>	1 31	90.0%	-	0.0%	1 31
	•	Subtotal (A)	76.39	90.6%	7 95	9.4%	84.34
в.	Ρı	uniab Irrigation Component	10100	001070	100	0.170	01101
	1	Civil Works	47.85	90.0%	5.32	10.0%	53.16
	2	Equipment and Vehicle <sup>a</sup>	0.38	90.0%	-	0.0%	0.38
	3	Consultants <sup>a</sup>	1.88	90.0%	-	0.0%	1.88
		a. Project Management	1.81	90.0%	-	0.0%	1.81
		b. Capacity Building	0.07	90.0%	-	0.0%	0.07
	4 Incremental Administrative Cost <sup>a</sup>		1.10	90.0%	-	0.0%	1.10
		Subtotal (B)	51.20	90.6%	5.32	9.4%	56.52
C.	Ρι	unjab DRM (Irrigation)					
	1	Civil Works	-	90.0%	-	10.0%	-
	2	Equipment and Vehicle <sup>a</sup>	0.82	90.0%	-	0.0%	0.82
	3	Consultants <sup>a</sup>	0.47	90.0%	-	0.0%	0.47
		a. Project Management	0.31	90.0%	-	0.0%	0.31
		b. Capacity Building	0.16	90.0%	-	0.0%	0.16
	4	Incremental Administrative Cost <sup>a</sup>	0.01	90.0%	-	0.0%	0.01
		Subtotal (C)	1.30	100.0%	-	0.0%	1.30
D.	Ρι	unjab DRM (PDMA)					
	1	Civil Works	-	90.0%	-	10.0%	-
	2	Equipment and Vehicle <sup>a</sup>	0.68	90.0%	-	0.0%	0.68
	3	Consultants <sup>a</sup>	0.36	90.0%	-	0.0%	0.36
		a. Project Management	0.26	90.0%	-	0.0%	0.26
		b. Capacity Building	0.10	90.0%	-	0.0%	0.10
	4	Incremental Administrative Cost <sup>a</sup>	3.94	90.0%	-	0.0%	3.94
		Subtotal (D)	4.97	100.0%	-	0.0%	4.97
Е.	Ρι	unjab DRM (P&D)					
	1	Civil Works	-	90.0%	-	10.0%	-
	2	Equipment and Vehicle <sup>a</sup>	0.34	90.0%	-	0.0%	0.34
	3	Consultants <sup>a</sup>	0.01	90.0%	-	0.0%	0.01
		a. Project Management	0.01	90.0%	-	0.0%	0.01
		b. Capacity Building	0.00	90.0%	-	0.0%	0.00

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Item				DB (OCR)	Go		
				% of		% of	
			Amount	Cost Category	Amount	Cost	Total Cost
	4	Incremental Administrative Cost <sup>a</sup>	1.18	90.0%	-	0.0%	1.18
	-	Subtotal (E)	1.53	100.0%	-	0.0%	1.53
F.	Ha	aveli, Kotli and Poonch districts Roads and				0.0,0	
	Br	ridges					
	1	Civil Works	39.88	90.0%	4.43	10.0%	44.31
	2	Equipment and Vehicle <sup>a</sup>	0.23	90.0%	-	0.0%	0.23
	3	Consultants <sup>a</sup>	2.97	90.0%	-	0.0%	2.97
		a. Project Management	2.97	90.0%	-	0.0%	2.97
		b. Capacity Building	-	90.0%	-	0.0%	-
	4	Incremental Administrative Cost <sup>a</sup>	0.55	90.0%	-	0.0%	0.55
		Subtotal (F)	43.64	90.8%	4.43	9.2%	48.07
G.	Ha	aveli, Kotli and Poonch districts DRM (P&D)					
	1	Civil Works	-	90.0%	-	10.0%	-
	2	Equipment and Vehicle <sup>a</sup>	0.17	90.0%	-	0.0%	0.17
	3	Consultants <sup>a</sup>	0.66	90.0%	-	0.0%	0.66
		a. Project Management	0.38	90.0%	-	0.0%	0.38
		b. Capacity Building	0.28	90.0%	-	0.0%	0.28
	4	Incremental Administrative Cost <sup>a</sup>	0.84	90.0%	-	0.0%	0.84
		Subtotal (G)	1.67	100.0%	-	0.0%	1.67
н.	Ha	aveli, Kotli and Poonch districts DRM					
	(F	orest)		00.00/	0.50	40.00/	- 07
	1		4.74	90.0%	0.53	10.0%	5.27
	2		-	90.0%	-	0.0%	-
	3	Consultants	-	90.0%	-	0.0%	-
		a. Project Management	-	90.0%	-	0.0%	-
		b. Capacity Building	-	90.0%	-	0.0%	-
	4	Incremental Administrative Cost <sup>a</sup>	-	90.0%	-	0.0%	-
		Subtotal (H)	4.74	90.0%	0.53	10.0%	5.27
		Total Base Cost	185.45	91.1%	18.22	8.9%	203.67
I.	Lo	ocal Taxes and Duties	-	0.0%	2.38	100.0%	2.38
J.	С	ontingencies	24.30	87.0%	3.63	13.0%	27.93
Κ.	Fi	nancing Charges During Implementation	8.29	100.0%	-	0.0%	8.29
Tot	al C	Cost (A-K)	218.04	90.0%	24.23	10.0%	242.27

<sup>a</sup> Government financing is for financing of sales tax and custom duties.

# D. Detailed Cost Estimates by Outputs/Components

ltem		Total Cost	Punjab Roads		Punjab Irrigation		Punjab DRM (Irrigation)		Punjab DRM (PDMA)		Punjab DRM (P&D)		Haveli, Kotli, Poonch districts Roads and Bridges		Haveli, Kotli, Poonch districts DRM (P&D)		Haveli, Kotli, Poonch districts DRM (Forest)		
				Amount	% of Cost Category	Amount	% of Cost Category	Amount	% of Cost Category	Amount	% of Cost Category	Amount	% of Cost Category	Amount	% of Cost Category	Amount	% of Cost Category	Amount	% of Cost Category
A. Investment Costs																			
·	1	Civil Works	182.2	79.5	43.6%	53.2	29.2%	-	0.0%	-	0.0%	-	0.0%	44.3	24.3%	-	0.0%	5.3	2.9%
2	2	Equipment and Vehicle	3.6	0.7	19.3%	0.4	11.7%	0.9	25.3%	0.8	20.9%	0.4	10.5%	0.3	7.2%	0.2	5.2%	-	0.0%
3	3	Consultants	10.3	3.2	31.5%	2.1	20.3%	0.5	5.1%	0.4	3.9%	0.0	0.2%	3.3	32.0%	0.7	7.1%	-	0.0%
		a. Project Management	9.5	3.1	32.8%	2.0	21.2%	0.3	3.7%	0.3	3.1%	0.0	0.1%	3.3	34.7%	0.4	4.4%	-	0.0%
		b. Capacity Building	0.8	0.1	15.8%	0.1	10.0%	0.2	22.3%	0.1	13.4%	0.0	0.3%	-	0.0%	0.3	38.3%	-	0.0%
		Subtotal (A)	196.1	83.4	42.5%	55.7	28.4%	1.4	0.7%	1.2	0.6%	0.4	0.2%	47.9	24.4%	0.9	0.5%	5.3	2.7%
B. F	Recur	rrent Costs																	
	1	Incremental Administrative Cost	9.9	1.5	14.6%	1.2	12.3%	0.0	0.1%	4.4	44.1%	1.3	13.2%	0.6	6.2%	0.9	9.4%	-	0.0%
		Subtotal (B)	9.9	1.5	14.6%	1.2	12.3%	0.0	0.1%	4.4	44.1%	1.3	13.2%	0.6	6.2%	0.9	9.4%	-	0.0%
C. (	Conti	ngencies																	
	1	Physical	16.0	5.8	36.0%	5.3	33.3%	0.1	0.9%	0.4	2.4%	0.1	0.5%	3.8	23.5%	0.1	0.9%	0.4	2.6%
2	2	Price	12.0	4.9	41.2%	3.3	27.6%	0.1	0.7%	0.3	2.7%	0.1	0.8%	2.8	23.5%	0.1	0.9%	0.3	2.6%
		Subtotal (C)	27.9	10.7	38.2%	8.6	30.8%	0.2	0.8%	0.7	2.5%	0.2	0.6%	6.6	23.5%	0.3	0.9%	0.7	2.6%
D. I	Finano	cing Charges During Implementation																	
	1	Interest During Implementation	7.8	3.3	42.5%	2.2	28.4%	0.1	0.7%	0.0	0.6%	0.0	0.2%	1.9	24.4%	0.0	0.5%	0.2	2.7%
2	2	Commitment Charges	0.5	0.2	42.5%	0.1	28.4%	0.0	0.7%	0.0	0.6%	0.0	0.2%	0.1	24.4%	0.0	0.5%	0.0	2.7%
		Subtotal (D)	8.3	3.5	42.5%	2.4	28.4%	0.1	0.7%	0.0	0.6%	0.0	0.2%	2.0	24.4%	0.0	0.5%	0.2	2.7%
Tota	Total Cost (A+B+C+D)		242.3	99.1	40.9%	67.9	28.0%	1.7	0.7%	6.3	2.6%	1.9	0.8%	57.1	23.6%	2.1	0.9%	6.2	2.6%

# E. Detailed Cost Estimates by Year

	lte	em	Total Cost	2015	2016	2017	2018
Α.	Ρι	unjab Roads Component					
	1	Civil Works	71.54	9.00	39.00	15.00	8.54
	2	Equipment and Vehicle	0.62	0.62	-	-	-
	3	Consultants	2.92	0.22	1.23	1.26	0.20
		a. Project Management	2.80	0.22	1.18	1.21	0.20
		b. Capacity Building	0.11	-	0.06	0.06	-
	4	Incremental Administrative Cost	1.31	0.10	0.40	0.40	0.41
		Subtotal (A)	76.39	9.95	40.63	16.66	9.15
В.	Ρι	unjab Irrigation Component					
	1	Civil Works	47.85	1.89	27.01	16.73	2.21
	2	Equipment and Vehicle	0.38	0.38	-	-	-
	3	Consultants	1.88	0.14	0.60	0.60	0.55
		a. Project Management	1.81	0.14	0.56	0.56	0.55
		b. Capacity Building	0.07	-	0.04	0.04	-
	4	Incremental Administrative Cost	1.10	0.15	0.31	0.31	0.31
		Subtotal (B)	51.20	2.57	27.92	17.64	3.07
С.	Ρι	unjab DRM (Irrigation)					
	1	Civil Works	-	-	-	-	-
	2	Equipment and Vehicle	0.82	-	0.51	0.32	-
	3	Consultants	0.47	-	0.36	0.05	0.06
		a. Project Management	0.31	-	0.31	0.00	-
		b. Capacity Building	0.16	-	0.05	0.05	0.06
	4	Incremental Administrative Cost	0.01	-	0.01	0.01	-
		Subtotal (C)	1.30	-	0.87	0.37	0.06
D.	Ρι	unjab DRM (PDMA)					
	1	Civil Works	-	-	-	-	-
	2	Equipment and Vehicle	0.68	-	0.68	-	-
	3	Consultants	0.36	0.02	0.14	0.14	0.06
		a. Project Management	0.26	0.02	0.09	0.09	0.06
		b. Capacity Building	0.10	-	0.05	0.06	-
	4	Incremental Administrative Cost	3.94	0.22	1.32	1.32	1.08
		Subtotal (D)	4.97	0.24	2.14	1.46	1.14
Ε.	Ρι	unjab DRM (P&D)					
	1	Civil Works	-	-	-	-	-
	2	Equipment and Vehicle	0.34	-	0.34	-	-
	3	Consultants	0.01	-	0.01	-	-
		a. Project Management	0.01	-	0.01	-	-
		b. Capacity Building	-	-	-	-	-
	4	Incremental Administrative Cost	1.18	0.13	0.39	0.39	0.27

	ltem	Total Cost	2015	2016	2017	2018
	Subtotal (E)	1 53	0.13	0.74	0.30	0.27
	Haveli, Kotli and Poonch districts Roads	1.55	0.15	0.74	0.55	0.27
F.	and Bridges					
	1 Civil Works	39.88	-	10.38	20.67	8.84
	2 Equipment and Vehicle	0.23	-	0.23	-	-
	3 Consultants	2.97	0.03	1.05	1.08	0.82
	a. Project Management	2.97	0.03	1.05	1.08	0.82
	b. Capacity Building	-	-	-	-	-
	4 Incremental Administrative Cost	0.55	0.09	0.18	0.18	0.09
	Subtotal (F)	43.64	0.12	11.84	21.93	9.75
G.	Haveli, Kotli and Poonch districts DRM (P&D)					
	1 Civil Works	-	-	-	-	-
	2 Equipment and Vehicle	0.17	-	0.17	-	-
	3 Consultants	0.66	-	0.33	0.12	0.21
	a. Project Management	0.38	-	0.23	0.03	0.12
	b. Capacity Building	0.28	-			0.09
	4 Incremental Administrative Cost	0.84	0.07	0.27	0.28	0.22
	Subtotal (G)	1.67	0.07	0.77	0.40	0.43
	Haveli, Kotli and Poonch districts DRM					
н.	(Forest)					
	1 Civil Works	4.74	-	0.93	1.87	1.93
	2 Equipment and Vehicle	-	-	-	-	-
	3 Consultants	-	-	-	-	-
	a. Project Management	-	-	-	-	-
	b. Capacity Building	-	-			-
	4 Incremental Administrative Cost	-	-	-	-	-
	Subtotal (H)	4.74	-	0.93	1.87	1.93
	Total Base Cost	185.45	13.07	85.84	60.73	25.80
I.	Contingencies	24.30	-	-	2.69	21.61
J.	Financing Charges During Implementation	8.29	1.10	2.01	2.61	2.57
Tot	tal Cost (A-J)	218.04	14.17	87.85	66.03	49.99



**Projections for Contract Award (\$ million)** 

Year	Q1	Q2	Q3	Q4	Total
2015			2.70	23.87	26.57
2016	51.85	30.68	46.93	0.56	130.02
2017	3.36	10.86	10.47	3.16	27.85
2018	5.27	16.79	3.25		25.31
				Total	209.75*

\*Net of IDC of \$8.29 million.

Projections	for Disbursement	(\$ million)
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Year	Q1	Q2	Q3	Q4	Total	
2015			1.52	12.65	14.17	
2016	27.47	15.00	23.14	22.24	87.85	
2017	20.11	15.17	14.92	15.82	66.03	
2018	16.91	25.99	6.72	0.37	49.99	
Total 218.04						

#### G. Fund Flow Diagram

Fund Flow of the Project is summarized in the diagram below, and will be followed by each executing and implementing agency (except for the Forest Department):



5. Financial management assessment has been conducted for the EAs and IAs of the respective Governments in accordance with ADB's *Guidelinesfor the Financial Management and Analysis of Projects*<sup>1</sup> and *A Methodology Note on Financial Due Diligence*<sup>2</sup>. Key findings are given below, while detailed findings for each of the EAs and IAs of the Project are given in Appendix 1.

#### A. Financial Management Assessment

6. The assessment confirmed that the EAs are committed to provide adequate number of accounting professionals and computerized financial accounting and reporting systems and procedures which will control accounting, financial and physical progresses related to the Project. The Government's New Accounting Manual shall be used which is adequate and is followed in all ADB projects in Pakistan. The EAs and IAs meet the overall financial management, accounting and auditing requirements, while the Borrower has expressed commitment to address issues relating to staffing and strengthening of the internal control process.

7. Financial management internal control and risk assessments have also been conducted for the EAs and IAs of the Project in accordance with ADB's *Guidelines for the Financial Managementand Analysis of Projects*. The overall inherent risk was assessed as moderate primarily due to security-related factors. The overall control risk was also assessed as substantial. The governments responsible for Punjab Province and the districts of Haveli, Kotli, Poonch have considerable experience in implementing externally financed projects, including several on-going and closed projects in Punjab Province. The risk mitigation measures are set out below and establishment of PCUs at the EA level and PIUs at each IA level with qualified professionals will help in smooth implementation of the Project.

Risk Type	Risk		
	Assessment	<b>Risk Description</b>	<b>Risk Mitigation Measures</b>
1. Country- Specific Risks	L	No significant budgetary or financial management issues are evident vis-à-vis allocations, releases and accounting of Development Budgets in the case of Punjab Province and Haveli, Kotli and Poonch districts	The National Accounting, development budget system financial. controls and auditing procedures are adequate in the country
2. Entity- Specific Risks	L	No major issues were noted	<ul> <li>All EAs and IAs have established accounting and reporting systems</li> <li>Past audit reports of the IAs and EAs do not identify any major accounting or control issues.</li> </ul>
3. Project Specific Risks	L	The project locations requiring rehabilitation works are geographically scattered	Payments will be made from by the PIUs and there will be no second generation imprest accounts to ensure better control and monitoring.
Control Risk			
1. Executing and implementing agencies	Μ	- The EA and IAs of Punjab have good experience in implementing ADB and other multilateral and bilateral	Performance of the PCUs and PIUs will be closely monitored and staff capacity building shall be done by ADB

#### Summary of Financial Management Internal Control and Risk Assessment

<sup>&</sup>lt;sup>1</sup> ADB. 2005. *Financial Management and Analysis of Projects*. Manila. Available at:

http://www.adb.org/Documents/Guidelines/Financial/default.asp.

<sup>&</sup>lt;sup>2</sup> ADB. 2009. *Financial Due Diligence: A Methodology Note*. Manila. Available at: http://www.adb.org/Documents/Others/FM-toolkit/Methodology-Note.pdf

Risk Type	Risk	<b>Dick Decerintion</b>	Diek Mitigetien Messures
	Assessment	Risk Description	RISK Mitigation measures
		<ul> <li>The P&amp;D for Haveli, Kotli and Poonch districts, on the other hand, has no direct experience in project implementation in the recent past but it has iimplemented various large projects including ADB's Earthquake and multi sector projects. The IA for the roads component has considerable experience in project implementation</li> </ul>	
2. Funds Flow		The loan proceeds will be disbursed in accordance with ADB's <i>Loan Disbursement</i> <i>Handbook</i> and there is little risk foreseen.	<ul> <li>A rule based mechanism for fund flow is available and governed under rules of the Ministry of Finance:</li> <li>Imprest Accounts shall be used for the share of external financiers (ADB, WB etc.)</li> <li>Assignment Accounts shall be used for GOP counterpart funding by each EA and IA</li> <li>Direct payment procedure shall be used for large value payments or payments which require disbursement in foreign currency</li> <li>Reimbursement procedure shall be used for retroactive financing of eligible works in Punjab</li> <li>Force Account Work procedure shall be used to reimburse the work done by Forest Departmentfor Haveli, Kotli and Poonch under the DRM component</li> </ul>
3. Staffing	М	Availability of qualified and trained finance and accounts staff at the PCUs and PIUs shall be critical	<ul> <li>Assurance given by the Government that prior to loan effectiveness, qualified staff shall be posted at all PCUs and PIUs</li> <li>Adequately staffed PCUs and PIUs to be a condition precedent for loan disbursements</li> </ul>
4. Accounting Policies and Procedures	N	Implementation of given rules is important	Accounting standards and practices are based on Pakistan National Accounting Standards which are in compliance with International Accounting Standards. All EAs and IAs are using the National systems and procedures, and no major issues are noted
5. Internal Audit	M	<ul> <li>Internal Audit units are not fully operational at the EA and IA levels</li> <li>Internal audit functions are mainly perceived and limited to pre-audit of payments</li> </ul>	<ul> <li>Government has assured that each line department or the PIU/PCU shall have a dedicated staff assigned to internal audit functions. ADB will ensure staffing and compliance prior to loan disbursement.</li> <li>ADB will train such staff after loan effectivity</li> </ul>

Risk Type	Risk		
	Assessment	Risk Description	Risk Mitigation Measures
6. External Audit	N	The Department of Auditor General of Pakistan (AGP) shall conduct Audit and submit separate Audited Project Financial Statements within the due date for all EAs and IAs.	ADB works closely with the AGP to ensure timely submission of audited project accounts.
7. Reporting and Monitoring	М	Quality of project financial statements is an issue which needs to be addressed	ADB is working with all EAs to improve the quality of project financial statements so that all essential financial information is suitably disclosed. EAs and IAs of the Project shall also be trained
8. Information System	Ν	Computerized accounting system is needed to ensure quality and timeliness of preparation of project financial statements and other management accounting and information reports	<ul> <li>Punjab and Haveli, Kotli and Poonch districts have access to the on-line accounting terminals of the respective Accountant General's offices.</li> <li>Government has provided assurance to arrange access to all PCUs and PIUs</li> <li>Alternately, the PCUs and PIUs shall be mandated to have their own standalone computerized accounting packages</li> </ul>
Overall Control Risk	S		

\*H = High, S = Substantial, M = Moderate, N = Negligible or Low.

#### B. Disbursement

8. The Loan proceeds will be disbursed in accordance with ADB's *Loan Disbursement Handbook* (2015, as amended from time to time),<sup>3</sup> and detailed arrangements agreed upon between the Government and ADB. In order to ensure separate accounting and financial reporting, each of the EAs and the IAs shall request for the borrower's authorization to withdraw funds from the loan account to meet expenditure under their respective loan components. Withdrawals from the loan account shall be made after all PCUs and PIUs have recruited accounting, finance and internal audit staff.

9. Reimbursement procedure shall be used for retroactive financing of eligible subprojects under the Irrigation and Roads components of Punjab's share of the Project. Disbursement from the loan account under all claims of retroactive financing will be made by ADB after loan effectiveness to the Non-food Account-1 of Punjab upon submission of a withdrawal application and Statement of Expenditure forms.

10. Force Accounts Works procedure shall be used for the DRM component in Haveli, Kotli and Poonch districts to finance activities undertaken by the Forest Department. Eligible project expenditures will be reimbursed to the Non-food Account-1 of P&D for the aforementioned districts either through the PCU's imprest account or by ADB upon submission of a withdrawal application by the PCU. Two certificates will be used instead of the usual supporting documents in accordance with the Loan Disbursement Handbook (refer to Appendix 9D of LDH)

<sup>&</sup>lt;sup>3</sup> Available at: <u>http://www.adb.org/Documents/Handbooks/Loan\_Disbursement/loan-disbursement-final.pdf</u>

11. Direct payment procedure will be used for large value payments, or payments which require disbursement in a foreign currency for civil works contracts, procurement of equipment and for consulting services.

12. Immediately after loan effectiveness, the PCUs and the PIUs of Punjab Province and Haveli, Kotli and Poonch districts will open imprest accounts at the National Bank of Pakistan branches in Lahore and Muzaffarabad respectively in accordance with Finance Division Procedures. The imprest account is to be used exclusively for ADB's share of eligible expenditures. Imprest accounts will be established, managed, and liquidated in accordance with ADB's Loan Disbursement Handbook and detailed arrangements agreed by the Government and ADB. ADB's Loan Disbursement Handbook describes which supporting documents should be submitted to ADB and which should be retained by the government for liquidation and replenishment of an Imprest account. The request for initial advance to the imprest account should be accompanied by an Estimate of Expenditure Sheet<sup>4</sup> setting out the estimated expenditures for the first six (6) months of project implementation. The total outstanding advance to the imprest account should not exceed the estimate of ADB's share of expenditures to be paid through the imprest account for the forthcoming 6 months. For every liquidation and replenishment request of the imprest account, the EAs and IAs will furnish to ADB (a) Statement of Account (Bank Statement) where the imprest account is maintained, and (b) the Imprest Account Reconciliation Statement (IARS) reconciling the above mentioned bank statement against the EA's records.<sup>5</sup>

13. The EAs and IAs will be responsible to prepare their respective annual budgets requests to ensure adequate budgetary provisions are there for Project financing and to ensure adequate counterpart funding.

14. The statement of expenditure (SOE) procedure will be used to reimburse eligible expenditure and to liquidate and replenish the imprest account. SOE records should be maintained by each EA and IA, and made readily available for review by ADB's disbursement and review mission or upon ADB's request for submission of supporting documents on a sampling basis, and for independent audit.<sup>6</sup>

15. Before the submission of the first withdrawal application (WA), each PCU and PIU should submit through the borrower (or EAD), to ADB sufficient evidence of the authority of the person(s) who will sign the WAs on behalf of the borrower, together with the authenticated specimen signatures of each authorized person. The minimum value for each withdrawal shall be \$100,000 equivalent. Individual payments below this amount should be paid (i) by the PCUs or PIUs and subsequently claimed to ADB through reimbursement, or (ii) through the imprest fund procedure, unless otherwise accepted by ADB.

#### C. Accounting

16. The EAs and IAs will maintain, or cause to be maintained, separate books and records by funding source for all expenditures incurred on the project. The EAs and IAs will prepare separateproject financial statements for their respective components in accordance with the Government's accounting laws and regulations which are consistent with international accounting principles and practices.

<sup>&</sup>lt;sup>4</sup> Available in Appendix 29 of the *Loan Disbursement Handbook*.

<sup>&</sup>lt;sup>5</sup> Follow the format provided in Appendix 30 of the *Loan Disbursement Handbook*.

<sup>&</sup>lt;sup>6</sup> Checklist for SOE procedures and formats are available at: <u>http://www.adb.org/documents/handbooks/loan\_disbursement/chap-09.pdf</u> <u>http://www.adb.org/documents/handbooks/loan\_disbursement/SOE-Contracts-100-Below.xls</u> <u>http://www.adb.org/documents/handbooks/loan\_disbursement/SOE-Contracts-Over-100.xls</u> <u>http://www.adb.org/documents/handbooks/loan\_disbursement/SOE-Operating-Costs.xls</u> <u>http://www.adb.org/documents/handbooks/loan\_disbursement/SOE-Free-Format.xls</u>
17. For Punjab and, separate project financial statements will be prepared by each of the four IAs, i.e., P&D, PID, C&W and PDMA. In the case of Haveli, Kotli and Poonch districts, separate project financial statements will be prepared by the P&D Department (which will include Project expenditures of the Forest Department) and the C&W Department.

## D. Auditing and Public Disclosure

18. The EAs and IAs will cause the project accounts and project financial statements pertaining to their respective Project components to be audited in accordance with International Standards on Auditing and in accordance with the audit regulations and procedures of the Department of the Auditor General of Pakistan. The annual audit report for the project accounts will include audited project financial statements, an audit management letter and audit opinions which cover (i) whether the project financial statements present a true and fair view or are presented fairly; in all material respects, in accordance with the applicable financial reporting framework; (ii) whether Ioan and grant proceeds were used only for the purposes of the project or not; (iii) the level of compliance for each financial covenant contained in the legal agreements for the project; (iv) use of the imprest fund procedure; and (v) the use of the statement of expenditure procedure certifying to the eligibility of those expenditures claimed under SOE procedures, and proper use of the SOE and imprest procedures in accordance with ADB's Loan Disbursement Handbook and the project documents.

19. Separate Audited Project Financial Statements will be due from the EA and each of the three IAs in Punjab. A separate Audited Project Financial Statements will be due from the EA and one IA (C&W Department) for Haveli, Kotli and Poonch districts. Project Financial Statements of the EAs and the IAs listed above shall be conducted by the Department of Auditor General of Pakistan.

20. Compliance with financial reporting and auditing requirements will be monitored by review missions and during normal project supervision, and followed up regularly with all concerned, including the external auditor.

21. The Government and the EAs and IAs have been made aware of ADB's policy on delayed submission of audited project financial statements and the audit reports, and the requirements for satisfactory and acceptable quality of the audited project financial statements.<sup>7</sup> ADB reserves the right to require a change in the auditor (in a manner consistent with the constitution of the borrower), or for additional support to be provided to the auditor, if the audits required are not conducted in a manner satisfactory to ADB, or if the audits are substantially delayed. ADB reserves the right to verify the project's financial accounts to confirm that the share of ADB's financing is used in accordance with ADB's policies and procedures.

22. Public disclosure of the project financial statements, including the audit report on the project financial statements, will be guided by ADB's Public Communications Policy (2011).<sup>8</sup> After review, ADB will disclose the audited project financial statements for the project and

<sup>&</sup>lt;sup>7</sup> ADB Policy on delayed submission of audited project financial statements:

<sup>•</sup> When audited project financial statements are not received by the due date, ADB will write to the executing agency advising that (i) the audit documents are overdue; and (ii) if they are not received within the next six months, requests for new contract awards and disbursement such as new replenishment of imprest accounts, processing of new reimbursement, and issuance of new commitment letters will not be processed.

When audited project financial statements <u>have not been received within 6 months after the due date</u>, ADB will withhold processing of requests for new contract awards and disbursement such as new replenishment of imprest accounts, processing of new reimbursement, and issuance of new commitment letters. ADB will (i) inform the executing agency of ADB's actions; and (ii) advise that the loan may be suspended if the audit documents are not received within the next six months.

<sup>•</sup> When audited project financial statements <u>have not been received within 12 months after the due date</u>, ADB may suspend the loan.

<sup>&</sup>lt;sup>8</sup> Available from http://www.adb.org/documents/pcp-2011?ref=site/disclosure/publications.

the opinion of the auditors on the financial statements within 30 days of the date of their receipt by posting them on ADB's website. The Audit Management Letter will not be disclosed.

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## VI. PROCUREMENT AND CONSULTING SERVICES

23. The procurement of goods, works and services and any advance procurement will follow ADB's Disaster and Emergency Assistance Policy, as well as ADB's Procurement Guidelines April 2015, (as amended from time to time) and ADB's Guidelines on the Use of Consultants March 2013, (as amended from time to time).

# A. Advance Contracting and Retroactive Financing

24. In general, retroactive financing for C&W and PID will be subject to ADB review establishing: (i) the soundness of the procurement process and use of extreme urgency under PbPR, 2014, (ii) BOQ of all contracts and price verification of awarded contracts against market norms, (iii) documentary evidence of the payments made, and (iv) random physical sampling on physical works undertaken retroactively.

25. Where extreme urgency and advance contracting under PbPRs have been used for procurement, and the contracts have been completed before 28 May 2015; only those contracts will be considered for retroactive financing. The start date of the flood emergency is 3 September 2014. All other contracts after loan effectiveness or up to 12 months from the start of the flood will be procured through regular procurement procedures acceptable to ADB. The total retroactive financing for all contracts procured retroactively would still be limited to an upper limit of 30% of the loan amount. This arrangement will apply to all implementing agencies. There is no retroactive financing and advance procurement by EA or the IAs in the flood-affected districts of Haveli, Kotli and Poonch. Force account method used for land stabilization pilots (bio-engineering) to be undertaken by the Forest Department for the flood-affected districts of Haveli, Kotli and Poonch will be used.

26. Detailed design review and construction supervision will be outsourced to the project management consultants (PMCs). PCU and PIUs will be established by IAs to administer subproject reconstruction contracts. IAs will be required to provide and place full time counterpart staff in the PIUs. These counterparts will possess the technical competence to advise on and approve transactions on behalf of their respective agencies. In the event that they lack the authority to do so they will have a direct reporting relationship to the IA officer that does possess this authority. The PMCs will provide overall design review and construction supervision services.

# B. Procurement of Goods, Works and Consulting Services

27. The procurement of goods, works and services and any advance procurement will follow ADB's Disaster and Emergency Assistance Policy, as well as ADB's Procurement Guidelines (April 2015, as amended from time to time) and ADB's Guidelines on the Use of Consultants (March 2013, as amended from time to time).

28. International competitive bidding (ICB) and national competitive bidding (NCB) procedures will be used to engage contractors and suppliers. In the case of provincial and district roads, and irrigation and flood management, subprojects will be consolidated as much as possible to reduce management and administration over load. Smaller and dispersed subprojects will be undertaken through competition amongst local contractors using PbPR, 2014. Bids can be invited on bill of quantities worked out for each package using NCB method acceptable to ADB. The IAs will use ADB SBDs for small works. Direct contracting can also be applied for qualified small civil contracts and supplies. ADB does not support bidding restricted to enlisted contractors only. Where the contractors missed the chance of getting enlisted with the department, they should be properly informed of the opportunity of civil works contracts before starting procurement through the regular procurement procedures. Other concessions under the emergency procedure could also

apply to regular procurement mainly to (i) reduce the bidding period of ICB to a minimum of 21 days and NCB to a minimum of 15 days.

29. The recruitment of project management consultants will be carried out through single source selection method in a manner consistent with the simplified and expedient procedures permitted under the ADB Disaster and Emergency Assistance Policy and ADB Guidelines on the Use of Consultants (March 2013 and as amended from time to time). The following types of consultants would be engaged under the project:

- (i) Design consultants for design of major roads of Haveli, Kotli and Poonch districts.
- (ii) Project management consultants and construction supervision of roads for Punjab and Haveli, Kotli and Poonch districts. Their TOR could include design review, if required.
- (iii) Project supervision consultants to review the designs of, and provide construction supervison for the irrigation and flood management component in Punjab Province.
- (iv) Individual consultants recruited and funded under the ADB associated technical assistance (TA) to provide services to PIUs of IAs and PCUs of P&DD.
- (v) Under the DRM component international/national firms (for MIS) and individual consultants will be hired using ADB's Guidelines on the Use of Consultants (March 2013, as amended from time to time) and fleaxabilities allowed under the ADB's Disaster and Emergency Assistance Policy. For Punjab, a firm will be hired to establish a project based management and financial information system, using quality and cost based selection. International and national individual consultants will be hired for developing and integrating a GIS based disaster management system for PDMA, including hazard exposure and risk mapping, modeling, horizontal and vertical interfacing, web application, training and capacity building. The individual consultants for Irrigation department will assist in establishment of a safety evaluation authority within the Irrigation Department by developing standard operating procedures and recommending tools and equipment required for safety inspection of the dams and other irrigation infrastructure.
- (vi) For the districts of Haveli, Kotli and Poonch, the individual consultants will be recruited for: (i) providing institutional support to establish a Climate-change Cell within the P&DD, (ii) develop a regional climate-change policy, (iii) support the forest department in all geological, geotechnical and geomorphological investigations for landslide risk assessment ad management, and (iv) suggest the measures and plan to convert the existing forestry practices in line with REDD+ implementation mechanism,
- (vii) Other Individual consultants (national and international) for different activities in different IAs will be hired directly by the IAs using ADB guidelines.

30. The core consulting services for preparation of design and PMCs (resident or top supervision) and DRM support activities will be hired by the IAs using Quality- and Cost-Based Selection (QCBS) – 90:10. The Single Source Selection (SSS) method may be employed if comparative advantage and need can be justified subject to ADB's prior approval.

31. Implementation arrangements of the project will allow dedicated resources for efficient procurement and third-party oversight on the process. Independent consultants hired directly by ADB through TA attached to the project will be placed in the IAs. The TA individual will: (i) assist in the preparation of documentation and assist in procurement process for recruitment of consultant firms, contractors and suppliers; (ii) support preparation, implementation and gender analysis and implementation and monitoring of gender action plans; (iii) establishment of financial control monitoring and disbursement procedures; (iv) design of a grievance redress system; (v) development of a methodology for and actual

review of contracts under retroactive financing, and (vi) provide oversight and guidance through the procurement process including observer status on procurement committees.

32. The following revisions to existing processes and procedures will apply to procurement of civil works and goods under the project

- (i) The ICB bidding period for goods and works may be reduced to 21 days;
- (ii) The NCB bidding period for goods and works may be reduced to 15 days;
- (iii) Bid securing declaration may be preferred; and
- (iv) Standard payment terms will be reduced from 56 to 28 days.

#### **Consulting Services**

33. The following revisions to existing processes and procedures will apply to other consulting services procurement under the project:

- (i) BTP proposals will be invited for all assignments below \$2 million and a 14 day submission period allowed.
- (ii) STP proposals will be invited for all assignments above \$2 million and a 21 day submission period allowed.
- (iii) Firms selected under SSS will not automatically be held to have a conflict of interest (COI) and will be allowed to compete for downstream activity on ADB's approval; COI will be examined on a case-by-case basis.
- (iv) Shortlists up to \$2 million may be made up of a minimum of three firms.

34. The review of sample cases of procurement transpired some gaps in the existing procurement practices by the Forest Department. The P&DD will make sure that following recommended actions are followed during procurement activity by forest department under Force Account. ADB will conduct a post review of procurement practices of forest department upon receipt of withdrawal application.

- (i) Purchase of stores and stocks valuing PKR 10 million or more will be referred to Central Purchase Committee for approval;
- (ii) In the absence of a formal tender document for procurement of goods, terms and conditions given in the advertisement should include; (a) a validity period of the quotation to be submitted; (b) quotations must be signed, stamped and sealed; and (c) reflect NTN of the bidder in the quotation;
- (iii) Ensure that bid box is available in the concerned forest office;
- (iv) Notify a committee of 3 members for opening and evaluation of bids/quotations;
- (v) Evaluation must be completed within the validity period of quotations and strictly in accordance with the terms and conditions laid down in the tender notice;
- (vi) Plan high value procurements in terms of packages or Lots where delivery at different sites at the same time is required; and
- (vii) Identify a different staff for delivery verification.

35. An 18-month procurement plan indicating thresholds and review procedures, goods, works, and consulting service contract packages and national competitive bidding guidelines is in Section C.

36. The terms of reference for all consulting services are referenced in Section D.

#### C. Procurement Plan

37. The procurement plan is prepared in accordance with OSFMD Pakistan specific (federal) template.

#### **Procurement Plan Basic Data**

Project Name: Flood Emergency Reconstruct	tion and Resilience Project (FERRP)				
Project Number:	Approval Number:				
Country: Pakistan (Punjab Province and	Executing Agency:				
the districts of Haveli, Kotli and Poonch)	Planning and Development Departments				
Project Procurement Classification: B	Implementing Agency:				
Procurement Risk: Low	Communication and Works (C&W) Departments Punjab Irrigation Department (PID) Punjab Disaster Management Authority (PDMA) Forest Department for Haveli, Kotli and				
Project Financing Amount (* 040.0 million	Poonch districts				
ADB Financing Amount: \$ 242.3 million ADB Financing: \$218.04 million Cofinancing (ADB Administered): NA Non-ADB Financing: NA	Loanciosing Date: 30 December 2018				
<b>Date of First Procurement Plan:</b> 29 May 2015	Date of this Procurement Plan: 16 June 2015				

# 1. Methods, Thresholds, Review and 18-Month Procurement Plan

#### 1.1 Procurement and Consulting Methods and Thresholds

38. Except as the Asian Development Bank (ADB) may otherwise agree, the following process thresholds shall apply to procurement of goods and works.

#### **Procurement of Goods and Works**

Method	Threshold	Comments
International Competitive Bidding for Goods	\$2,000,000	
National Competitive Bidding (NCB) for Works	Below \$15,000,000	
National Competitive Bidding for Goods	Below \$2,000,000	
Shopping for Works	Below \$100,000	
Shopping for Goods	Below \$100,000	
Direct Contracting	Below \$200,000	
Force Account		

Consulting Services						
Method	Comments					
Quality and Cost Based Selection (QCBS)	(90:10)					
Fixed Budget Selection						
Consultants' Qualifications Selection						
Least-Cost Selection						
Single Source Selection						
Individual Consultants	Various					

### 1.2 Goods and Works Contracts Estimated to Cost \$1 Million or More

39. The following table lists goods and works contracts for which the procurement activity is either ongoing or expected to commence within the next 18 months.

Package Number	General Description	Estimated Value (\$ million)	Procure- ment Method	Review	Bidding Proce- dure	Adver- tisement Date (quarter/ year)	Comments
Punjab Irriga Pun-IR-1-1	Protection of Jhelum City from the floods of River Jhelum	7.50	NCB	Prior	1S1E	Q3/2015	ADB SBDs for
Pun-IR-1-2	Protection of Jhelum City from the floods of River Jhelum	7.50	NCB	Prior	1S1E	Q3/2015	ADB SBDs for small works.
Pun-IR-2	Remodeling of Muzaffargarh Flood Bund	5.36	NCB	Prior/ Post	1S1E	Q3/2015	ADB SBDs for small works to be used. First contract prior review. Remaining post review
Pun-IR-3	Remodeling of LMB <sup>®</sup> of Taunsa Barrage	4.36	NCB	do	1S1E	Q3/2015	do
Pun-IR-4	Remodeling LMB of Marala Barrage.	3.75	NCB	do	1S1E	Q3/2015	do
Pun-IR-5	Remodeling of Right Embankment of Shujabad Branch from RD: 231580 - 279000	2.91	NCB	do	1S1E	Q3/2015	do
Pun-IR-6	Remodeling of LMB of Trimmu Barrage	2.64	NCB	do	1S1E	Q3/2015	do
Pun-IR-7	Remodeling of selected reaches of Jhang flood protection bund and Thattha Mahla Bund	2.23	NCB	do	1S1E	Q3/2015	do
Pun-IR-8	Remodeling of Akbar & Nawabpur Flood Bund	1.47	NCB	do	1S1E	Q3/2015	do
Pun-IR-9	Remodeling of LMB of Qadirabad barrage in critical reaches.	1.27	NCB	do	1S1E	Q3/2015	do
Haveli, Kotli	, Poonch districts C&W Component						1
AK-CW-1	Tatta Pani Hajira Road	3.80	NCB	Prior	1S1E	Q2/2016	ADB SBDs for small works to be used
AK-CW-2	Hajira - Abbaspur-Mahmood Gali road: Pack-1	3.00	NCB	Prior	1S1E	Q2/2016	do
AK-CW-3	Hajira - Abbaspur-Mahmood Gali road: Pack-2	6.00	NCB	Prior	1S1E	Q2/2016	do
AK-CW-4	Dhulli - Lasdanna - Mehmoodgali road: Pack-1	3.25	NCB	Prior	1S1E	Q2/2016	do
AK-CW-5	Dhulli - Lasdanna - Mehmoodgali road: Pack-2	2.50	NCB	Prior	1S1E	Q2/2016	do
AK-CW-6	Rawalakot - Hajira road	4.80	NCB	Prior	1S1E	Q2/2016	do
AK-CW-7	Azad Pattan - Rawalakot road	4.00	NCB	Prior	1S1E	Q2/2016	do
AK-CW-8	Trarkhel - Hajira road	3.40	NCB	Prior	1S1E	Q2/2016	do
AK-CW-9	Khaigala Ali Sojal Chura Gali Road	1.08	NCB	Prior	1S1E	Q2/2016	do
AK-CW-10	Thaliar Bridge Kotli to Tatta Pani	2.00	NCB	Prior	1S1E	Q2/2016	do
AK-CW-11	Tatapani road (Bypass slide intervention)	2.00	NCB	Prior	1S1E	Q2/2016	do
AK-CW-12	Protection of Abutments of various bridges over river Battar	1.19	NCB	Prior	1S1E	Q2/2016	do
AK-FA-1	Force Account Apex forest department	5.20	NA	NA	NA	Q3/2015	

<sup>&</sup>lt;sup>9</sup> Left marginal bund.

40. The following table lists consulting services contracts for which the recruitment activity is either ongoing or expected to commence within the next 18 months.

Package Number	General Description	Estimated Value (\$ million)	Recruit- ment Method	Review (Prior / Post)	Adver- tisement Date (quarter/ year)	Type of Pro- posal	Com- ments
PID-CS-1	Project Management Consultant (PMC), Irrigation	1.55	SSS <sup>10</sup>	Prior	Q3, 2015	BTP	National
CW-CS-2	PMC, C&W Punjab	2.38	SSS <sup>11</sup>	Prior	Q3, 2015	BTP	National
AK-CS-3	PMC,(Haveli, Kotli & Poonch districts)	2.9	QCBS (90:10)	Prior	Q3, 2015	STP <sup>12</sup>	National
AK-DC-4	Design Consultant,(Haveli, Kotli & Poonchdistricts)	0.4	SSS <sup>13</sup>	Prior	Q3/2015	BTP	National
MIS-CS-5	PPMS, Baseline and MIS, Pⅅ Punjab	1.01	QCBS (90:10)	Prior	Q3/2015	BTP	National

# 1.4 Goods and Works Contracts Estimated to Cost Less than \$1 Million

Goods and	Works							
Package Number	General Description	Esti- mated Value (\$ million)	Number of Contracts	Procure- ment Method	<b>Review</b> [Prior / Post/Post (Sample)]	Bidding Proce- dure	Adver- tisement Date (quarter/ year)	Comments
AK-DR 1-15	15 Small Works of District Roads	5.3	15	NCB	Post	1S1E	Q3/2015	ADB SBDs for small works to be used.
PID-IW 1-15	15 Small Works	6.55	15	NCB	Post	1S1E	Q3/2015	do
DM-EQ-1	Equipment and Material for PDMA	0.250	1	NCB	Prior	1S1E	Q3/2015	ADB SBDs for goods to be used
DM-EQ-2	Equipment and Material for DDMA	0.480	1	NCB	Prior	1S1E	Q3/2015	do
DM-EQ-3	Equipment and Material for Pⅅ, Punjab	0.630	1	NCB	Prior	1S1E	Q3/2015	do
DM-EQ-4	Equipment for Irrigation Punjab	0.905	1	NCB	Prior	1S1E	Q3/2015	do
DM-EQ-5a	Slide Monitoring Equip- Haveli, Kotli, Poonch	0.200	1	NCB	Prior	1S1E	Q3/2015	do
DM-EQ-5b	Equipment for Climate Cell, Haveli, Kotli and Poonch districts Pⅅ	0.023	1	Shopping	Post	1S1E	Q3/2015	ADB Shopping template is to be used
DM-EQ-6	Vehicles for Punjab and Haveli, Kotli and Poonchdistricts	0.654	Multiple	Shopping	Post	1S1E	Q4/2015	do
AK-EQ-1	Equipmet and vehicle, for PIUs	Below 100,000	Multiple	Shopping	Post	1S1E	Q3/2015	do
Pun-EQ-1	Equipment and Vehicles	0.232	Multiple	Shopping	Post	1S1E	Q4/2015	do

#### Consulting Services Contracts Less than \$100,000 (Smaller Value 1.5 Contracts)

41. The following table groups smaller-value goods, works and consulting services contracts for which the activity is either ongoing or expected to commence within the next 18 months.

<sup>&</sup>lt;sup>10</sup> PMC engaged for Sulemanki Barrage using ADB guidelines will be selected.

<sup>&</sup>lt;sup>11</sup> Consulting firm engaged for construction supervision for recently completed component of Works & Services, <sup>12</sup> Due to emergency project STP is recommended to complete in reduced period.

<sup>&</sup>lt;sup>13</sup> Consulting firms engaged for design preparation of highways (NHA) may be considered given the emergency.

Consulting Services								
Package Number	General Descrip-tion	Estimated Value (\$ million)	Number of Contracts	Recruit- ment Method	Review (Prior/Po st)	Advertisement Date (quarter/ year)	Type of Proposal	Comments
IC-1	Individual Consultants for DRM component	0.980	28	ICS	Prior	Q3, 2015	NA	ADB Guidelines for ICS
IC-2	Individual Consultants for Pⅅ Punjab	0.250	Multiple	ICS	Prior	Q3, 2015	NA	-do-

# 2. List of Awarded and On-going, and Completed Contracts

42. The following tables list the awarded and on-going contracts, and completed contracts.

# 1.1 Awarded and On-going Contracts

Goods and Works							
Package Number	General Description	Esti- mated Value	Awarded Contract Value \$ million	Procure- ment Method	Adver- tisement Date (quarter/ year)	Date of ADB Approval of Contract Award	Comments
C&W-PR	<ul> <li>A) C&amp;W</li> <li>Component</li> <li>a) Provincial</li> <li>Roads</li> <li>27 Contracts</li> <li>including</li> <li>VOs.</li> </ul>		1.29 5.28	Negotiated tendering under PbPR 2014			Some ongoing works were damaged by floods. Same were reconstructed through VOs in the existing contracts. Works under VOs are to be retroactively financed by ADB. 6 contracts are under advance contracting
	are on-going						using Punjab Public Procurement Rules, 2014. Lists attached
C&W-DR	b) District Roads: 737 Contracts Awarded		59.69	Negotiated tender-ing and NCB under PbPR 2014			Emergency works awarded and completed; will be reviewed for Retroactive financing. Remaining under Advance contracting using Punjab Public
	137 Contracts on-going		13.24	NCB			Procurement Rules, 2014. Lists attached
IRR	B) Irrigation Component a) Emergent Works: 79 contracts awarded under extreme urgency		2.72	Negotiated tendering			Emergency works awarded and completed; will be reviewed for Retroactive financing. List attached

# 3. National Competitive Bidding

# General

43. The procedures to be followed for national competitive bidding shall be those set forth in the Punjab Procurement Rules 2014 [No. ADMN (PPRA)10-2/2013] issued on the 13<sup>th</sup> Jan 2014 under the Public Procurement Regulatory Authority Act 2009 (VIII of 2009) with the clarifications and modifications described in the following paragraphs required for compliance with the provisions of the ADB Procurement Guidelines.

# Registration

- (i) Bidding shall not be restricted to pre-registered firms and such registration shall not be a condition for participation in the bidding process.
- (ii) Where registration is required prior to award of contract, bidders: (i) shall be allowed a reasonable time to complete the registration process; and (ii) shall not be denied registration for reasons unrelated to their capability and resources to successfully perform the contract, which shall be verified through post-qualification.

# Prequalification

44. Normally, post-qualification shall be used unless prequalification is explicitly provided for in the loan agreement/procurement plan. Irrespective of whether post qualification or prequalification is used, eligible bidders (both national and foreign) shall be allowed to participate.

# **Bidding Period**

45. Given the emergency nature of the project; the minimum bidding period is reduced to fifteen days (15) days prior to the deadline for the submission of bids.

# **Bidding Documents**

46. Procuring entities shall use the applicable standard bidding documents for the procurement of goods, works and services acceptable to ADB.

# Preferences

47. No domestic preference shall be given for domestic bidders and for domestically manufactured goods.

# Advertising

48. Invitations to bid shall be advertised in at least one widely circulated national daily newspaper or freely accessible, nationally-known website allowing a minimum of fifteen (15) days for the preparation and submission of bids. NCB contracts estimated to cost \$500,000 or more for goods and related services and &1,000,000 or more for civil works will be advertised on ADB's website via the posting of the Procurement Plan.

### **Bid Security**

49. Where required, bid security shall be in the form of a bank guarantee or call-deposit receipt (CDR) from a reputable bank.

#### Bid Opening and Bid Evaluation

- (i) Bids shall be opened in public.
- (ii) Evaluation of bids shall be made in strict adherence to the criteria declared in the bidding documents and contracts shall be awarded to the lowest evaluated bidder.
- (iii) Bidders shall not be eliminated from detailed evaluation on the basis of minor, non-substantial deviations.
- (iv) No bidder shall be rejected on the basis of a comparison with the employer's estimate and budget ceiling without the ADB's prior concurrence.
- (v) A contract shall be awarded to the technically responsive bid that offers the lowest evaluated price and no negotiations shall be permitted.

#### Rejection of all Bids and Rebidding

50. Bids shall not be rejected and new bids solicited without the ADB's prior concurrence.

#### Participation by Government-owned enterprises

51. Government-owned enterprises in the Islamic Republic of Pakistan shall be eligible to participate as bidders only if they can establish that they are legally and financially autonomous, operate under commercial law and are not a dependent agency of the contracting authority. Furthermore, they will be subject to the same bid and performance security requirements as other bidders.

#### **ADB Member Country Restrictions**

52. Bidders must be nationals of member countries of ADB, and offered goods and services must be produced in and supplied from member countries of ADB.

#### D. Consultant's Terms of Reference

53. Where needed the IA will engage a (i) design consultant(s) to carry out the detailed design of the proposed works. In case of the smaller repair works, the design consultant(s) will review and approve the IA's design prepared by their field staff; and (ii) the Project Management Consultants (PMCs) to strengthen, support and help monitor design and construction supervision services, and support the preparation, implementation, and monitoring of safeguard action plans including consultations and social and gender analysis as well as implementation and monitoring of gender action plans. PMCs will also assist in the establishment of financial control monitoring and disbursement procedures. The outline terms of reference (TOR) for each are given in Annex 5.

54. Social Safeguards: To ensure compliance with ADB Safeguard Policy Statement (2009) each EA will ensure the implementation of the following procedures in each component of FERRP. Each subproject that entails land acquisition and resettlement, and requires environment compliance, will comply with the frameworks-the Land Acquisition and Resettlement Framework (Annex 6) and Environmental Assessment and Review Framework (Annex 7). An environment and social unit (ESU) will be established in each EA/IA. There will be one EA and three IAs in Punjab, while for Haveli, Kotli and Poonch districts there will be one EA and two IAs. Punjab will have two ESUs established (one each in the C&W Department and PID), while one ESU will be established in the Haveli, Kotli and Poonch districts C&W Department. The ESUs, with the support of dedicated TA consultants, will be responsible for safeguard compliance as well as grievance handling. This includes preparing, disclosing and implementing the LARPs, and submitting monitoring reports to ADB and the EAs. The EAs and IAs will ensure that sufficient support is provided to the Board of Revenue to expedite any land acquisition. Funding for implementing land acquisition and resettlement plans (LARPs) will be made available before the award of civil works contracts. The LARPs will be submitted prior to contract award and approved LARPs implemented before the start of construction. For any subproject that requires land acquisition and resettlement, the EA/IAs will ensure all compensation and entitlements as detailed in the respective LARPs are paid prior to economic or physical displacement. Monitoring staff will be appointed on completion of engineering designs. All LARPs including updates will be disclosed to the displaced persons and placed on the project website.

55. **Environment:** To ensure compliance with SPS, there will be two Environment specialists hired. One Environment Specialist will be hired at the C&W department for Haveli, Kotli and Poonch, while in Punjab since there are two IAs: C&W (for roads sub projects) and PID (for irrigation sub projects) one Environment specialist will be hired by the P&DD Punjab. The two environment specialists will ensure implementation of the following requirements and procedures under the overall guidance of the Environmental Assessment and Review Framework (EARF). The environment specialists will:

- complete the Rapid Environmental Assessment (REA) refer to Annex 4 checklists (for roads and for irrigation sub projects) and classifying new subprojects;
- based on the completed REA checklists and following the SPS, and national environmental rules and regulations, prepare as required either environmental impact assessment (EIA) or initial environmental examination (IEEs), and environmental management plans (EMPs);
- (iii) submit the checklists and environmental assessment reports (EIA or IEE) to ADB as part of the approval of subprojects;
- (iv) include EMPs in bidding documents for future contracts;
- (v) obtain all regulatory clearances from the concerned environmental protection agency (provincial) before starting civil works;
- (vi) ensure that contractors prepare and implement site-specific EMPs (SSEMP);
- (vii) Monitor the implementation of the SSEMP
- (viii) disclose environment-related documents in the relevant PIUs and on the Project website;
- (ix) In case of unpredicted environmental impacts occurring during Project implementation, prepare and implement a Corrective Action Plan; and
- (x) Submit semi-annual environmental monitoring reports to ADB.

#### VIII. GENDER AND SOCIAL DIMENSIONS

Social and gender dimensions as detailed in the attached summary of social and 56. poverty reduction will include: (i) cash-for-work schemes for the local unskilled labor hired during the reconstruction work while providing incentives to the contractors to hire workers from the flood-affected population; (ii) under the component of disaster risk management, multi-hazardsvulnerability risk assessment and mapping exercise will incorporate poverty and social vulnerability assessments which will serve as a first-hand information for developing inclusive and pro-poor strategies/plans for social protection, disaster risk reduction, preparedness and post disaster response; (iii) the approach of "build back better" will include safety measures for the local population in project design for roads reconstruction; (iv) projects mitigating the disaster risks such as land sliding in Haveli, Kotli and Poonch districts and breaches in flood protection bunds in Punjab will also be piloted; and (v) community awareness raising campaigns targeting poor segments of the population will be carried out on disaster risk reduction, preparedness and response and (vi) sexdisaggregated baseline data will be collected at project onset, and GAP targets, specifically those pertaining to women's participation, will be adjusted per province as necessary The project has been categorized as "Effective Gender Mainstreaming", a gender action plan ensuring women's participation and benefits has also been developed and attached as Annex 8. All these provisions will be tracked through the project's monitoring and evaluation system.

# IX. PERFORMANCE MONITORING, EVALUATION, REPORTING AND COMMUNICATION

# A. Project Design and Monitoring Framework

#### Impacts the Project is aligned with:

Economic and social recovery from the 2014 floods by 2018 (National Disaster Management Plan 2012-2022\*)

Project Results Chain	Performance Indicators with Targets and Baselines	Data Sources and Reporting	Risks
Outcome			
Restoration and reconstruction of critical public and social infrastructure to multihazard resilience standards	a. By the end 2018, traffic volume of all type of vehicles in 23 flood-affected districts is equal or more than pre-flood levels (baseline 2013/14)	Progress reports of executing and implementin agencies and sub-project completion reports	Factors such as security restrict access to the project area. Rules restricting access to GIS data are re- invoked, restricting
	<ul> <li>b. By end 2018 agriculture production of major crops in Punjab equals or is above pre-flood levels (baseline:2013/2014, in '000 tons) Wheat: 18,000 Sugarcane: 43,000 Cotton: 8,900</li> </ul>	Federal and provincial government statistics on agriculture and cultivated land Punjab Agriculture Department reports	access to information. Competing priorities continue to overshadow investment in DRM in terms of budget allocation.
Outputs 1. Flood-damaged roads and bridges in Punjab Province and the districts of Haveli, Kotli and Poonch reconstructed	<ul> <li>1a. By the end of 2018, 1,740 km of damaged provincial highways and district roads repaired, rehabilitated and reconstructed</li> <li>1b.By 2018, 173 km of roads and bridges include safety measures that are friendly</li> </ul>	<ul> <li>1a. Progress reports provided by the Communication and Works departments and the Planning and Development departments</li> <li>1b. Progress reports and Gender Action Plan</li> </ul>	Logistics constraints, including availability of construction materials, delay construction.
	to women, children, the elderly, and persons with disabilities		
2. Flood resilient irrigation and flood management infrastructure in Punjab Province implemented	2a. At least 90% of selected flood protection and irrigation structures reconstructed and made more resilient by 2018.	2a. Punjab Planning and Development Department and PID progress reports.	Security concerns affect the mobility of consultants and contractors.

Project Results Chain	Performance Indicators with Targets and Baselines	Data Sources and Reporting	Risks				
3. DRM strengthened	3a. 200 ha of active slide area along major road corridors treated through bio- engineering interventions by 2018	3a. Project progress reports	Rules restricting access to GIS data are re- invoked, restricting access to information.				
	3b. Enhanced safety procedures for dams and flood protection structures institutionalized in PID by 2018	3b. PID reports	Federal DRM advisory group is unable to develop a common understanding on the scope and methodology				
	3c. Land-slide risk mitigation measures include procurement of 30% of the forest nurseries owned by women.	3c. Project progress reports	of the MHVRA.				
	3d. Gender-disaggregated data and analysis of multihazard vulnerability and risk assessments available for 20 most vulnerable districts by 2018	3d. Gender Action Plan					
1. Food-damaged ro Poonch reconstructer 1.1 Prepare procurement 1.2 Establish monitorin 1.3 Recruit and mobiliz 1.4 Design 10 contract 1.5 Award civil works of 1.6 Implement and cor	ads and bridges in Punjab Pr ed. ent documents by 31 October 201 ng and grievance redress system ze project management, supervisi t packages by 31 March 2016 contracts for all subprojects by 30 mplete civil works by 30 June 201	ovince and the distric 5. by 30 September 2015. on, and design consultar June 2016 8	ets of Haveli, Kotli and				
<ul> <li>2. Flood-resilient irrigation and flood management infrastructure in Punjab implemented.</li> <li>2.1 Recruit and mobilize project management and supervision consultant by 30 September 2015</li> <li>2.2 Prepare procurement documents by 31 October 2015</li> <li>2.3 Establish monitoring and grievance redress system by 30 September 2015</li> <li>2.4 Award civil works contracts for all subprojects by 30 June 2016</li> <li>2.5 Complete civil works by 31 December 2017</li> </ul>							
<ul> <li>3. DRM Strengthened.</li> <li>3.1 Procure GIS software and hardware by 31 March 2016.</li> <li>3.2 Undertake bio-engineering protection works on slides by 31 March 2018.</li> <li>3.3 Prepare procedures for safety inspection of dams, dikes, and flood protection works by 30 April 2016.</li> <li>3.4 Safety inspection equipment is procured and revised inspection procedures for dams and 2,000 km of flood embankments are operational by 31 December 2016.</li> <li>3.5 Complete staff training and capacity building by 31 December 2017.</li> <li>3.6 Conduct disaster risk and vulnerability assessment surveys in 16 to 20 most vulnerable districts by 31 December 2017.</li> <li>3.7 Draft climate change mitigation and adaptation action plan by 31 December 2016.</li> <li>3.8 Integrate DRM plans with development planning database by 31 March 2018.</li> <li>3.9 Approve and complete MHVRA scope and methodology in 16 to 20 most vulnerable districts, and develop mitigation and adaptation plans by 31 March 2018.</li> <li>4.0 Procure common DRM and planning database, software, and hardware by 30 June 2016.</li> </ul>							

### Key Activities with Milestones

Project Management Activities

Project offices fully staffed by 30 September 2015.

ADB finalizes terms of reference and work plans for individual consultants for at least three TA consultants for each implementing agency before 30 July 2015.

At least one TA consultants for each implementing agency hired and mobilized by 31 August 2015 First safeguard (environment, social, and gender) monitoring report produced by 30 October 2015 Project performance management system developed under the TA by March 2016 Project financial management system developed under the TA by 30 October 2015. First set of bidding documents submitted by all implementing agencies by 30 September 2015

A secure and access-controlled web portal for sharing of GIS-based MIS related to DRM developed under the TA by June 2018

#### Inputs

ADB: \$218,040,000 OCR loan

TA: \$2,000,000 grant (TASF-V)

Government: \$24,226,667

#### **Assumptions for Partner Financing**

Not Applicable

ADB = Asian Development Bank, DRM = disaster risk management, GIS = geographic information system, km = kilometer, MHVRA = multihazard vulnerability and risk assessment, MIS = management information system, PID = provincial irrigation department, TA = technical assistance.

\*National Disaster Management Plan, National Disaster Management Authority. Islamabad. 2012. Source: Asian Development Bank.

### B. Monitoring

57. **Project performance monitoring:** To monitor progress of the project in achieving the planned outcome and outputs, the EA will establish and maintain a Project Performance Monitoring System (PPMS), in accordance with ADB's Project Performance Monitoring System Handbook not later than six (6) months after project implementation begins, which will be updated on a semi-annual basis. A draft PPMS will be designed to permit adequate flexibility to adopt remedial actions regarding project design, schedules, activities, and development impacts. The draft PPMS will include the following indicators, among others: (i) project outcome, outputs and inputs, (ii) safeguards compliance, (iii) gender and social dimensions, and (iv) compliance with loan covenants.

58. At the beginning of project implementation, the PCUs and PIUs will develop comprehensive PPMS procedures to systematically generate data in the above areas in consultation with implementing agencies and with the assistance of consultants. The PCUs and PIUs will refine the PPMS framework, confirm achievable targets and monitoring and recording arrangements, and establish relevant systems and procedures. The PMU staff, with the support of a team of consultants, will collect baseline and progress data to develop the PPMS, and regularly monitor and report on PPMS activities. The PPMS procedures, performance indicators and their targets will be reviewed and approved by ADB.

59. **Compliance monitoring**: The loan covenants on policy, legal, financial, economic, environmental, labor standards, and others will be monitored regularly through various reports (monthly progress reports, quarterly progress reports, and annual reports), and discussion during review missions

60. **Safeguards monitoring**: The monitoring and reporting of the activities identified in the environment and resettlement action plans are discussed in Section XII. The environmental and social safeguards monitoring reports will be submitted bi-annually to ADB.

61. **Gender and social dimensions monitoring**: Targets/indicators highlighted in the GAP and other social/pro-poor provisions will be part of project's regular monitoring and

reporting systems developed by Project Coordination Unit (PCU). A Social and Gender Specialist will be hired for each PCU (1 each for Haveli, Kotli and Poonch districts and Punjab Province). S/he will assist in the implementation of GAP, monitoring and reporting against social and gender targets. S/he will be hired for an intermittent contract over the period of two years, with an option of extension based on the performance and future scope of work. S/he will work in close coordination with the Project Implementation Units and will be responsible for documenting the social and gender impacts. S/he will also assist in conducting consultations and interaction with the civil society and local community organizations as and when required.

# C. Evaluation

62. A project inception mission will be fielded within two months of loan effectiveness. ADB will conduct regular (at least three times per year) review missions during project implementation to assess implementation performance and progress towards achievement of project outcome and outputs; examine financial progress; and identify issues and constraints affecting the project and agree with the EAs and IAs time-bound action plans for their resolution. A mid-term review mission will also be undertaken within 18 months of loan effectiveness. This review will include a comprehensive assessment of project performance, identify any problems and constraints affecting project implementation, and reach agreement with the EA on required changes to address project shortcomings. The EAs and IAs will monitor project implementation in accordance with the schedule and time-bound milestones, and keep ADB informed of any significant deviations that may result in the milestones not being met. The EAs will submit the mid-term review report to ADB three (3) weeks in advance of the planned mid-term review. This will be used as a basis to thoroughly assess project performance and progress towards meeting the expected outcomes and impacts. and agree on any necessary changes to Project scope or implementation arrangements. Within 6 months of physical completion of the Project the EAs will submit a project completion report to ADB.<sup>14</sup>

# D. Reporting

63. The executing and implementing agencies will provide ADB with (i) quarterly progress reports in a format consistent with ADB's project performance reporting system; (ii) consolidated annual reports including (a) progress achieved by output as measured through the indicator's performance targets, (b) key implementation issues and solutions; (c) updated procurement plan and (d) updated implementation plan for next 12 months; and (iii) a project completion report within 6 months of physical completion of the project. To ensure projects continue to be both viable and sustainable, project accounts and the executing agency AFSs, together with the associated auditor's report, should be adequately reviewed.

# E. Stakeholder Communication Strategy

64. The following table lists the project information that will be communicated, how and when the information will be disseminated and by whom, and the target audience.

<sup>&</sup>lt;sup>14</sup> Project completion report format is available at: <u>http://www.adb.org/Consulting/consultants-toolkits/PCR-Public-Sector-Landscape.rar</u>

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Project	Means of	Responsible		•
PID	ADB website	ADB	Frequency Initial PID no later than 30 calendar days after approval of the Loan/Grant; quarterly afterwards	Audience General public
DMF	ADB website	ADB	Draft DMF within 14 days after Fact-finding mission	Project-affected people
Environmental Planning Documents	ADB website	ADB	Draft environmental assessment review framework within 10 days after Fact-finding mission	General public, project-affected people in particular
Report and Recommendation of the President	ADB's website	ADB	Within 2 weeks of Board approval of the project	General public
Project Administration Manual	ADB website	ADB	Within 2 weeks of Board approval of the project	General public
Summary Poverty Reduction and Social Strategy	ADB website	ADB	Within 2 weeks of Board approval of the project	General public
Audited project financial statements and audit report	ADB website	ADB	Within 30 days of receipt by ADB	General public
Social and Environmental Monitoring Reports	ADB website	ADB	Upon receipt from borrower/sponsor	General public, project-affected people in particular
Major Change in Scope	ADB website	ADB	Within 2 weeks of approval of the change	General public
Progress Reports	ADB's website	ADB	Within 2 weeks of circulation to Board or management approval if applicable	General public
Completion Report	ADB website	ADB	Within 2 weeks of circulation to the Board for information	General public
Evaluation Reports	ADB website	ADB	Routinely disclosed	General public
Project Implementa	tion			
General advisory on the project and all aspects of implementation and safeguards as it applies to beneficiaries	Information note in local language, hard copy, to all potential beneficiaries	EAs/IAs/PCU/PIU	One time, within first 2 months of project effectiveness	Beneficiaries
Advisory on how to access official project docs	Information note in local language, hard copy, to all potential beneficiaries	EAs/IAs/PCU/PIU	One time, within first 2 months of project effectiveness	Beneficiaries

ADB = Asian Development Bank, DMF = design and monitoring framework, EA = executing agency, IA = implementing agency, PID = project information document.

65. ADB reserves the right to investigate, directly or through its agents, any violations of the Anticorruption Policy relating to the Project.<sup>15</sup> All contracts financed by ADB shall include provisions specifying the right of ADB to audit and examine the records and accounts of the executing agency and all Project contractors, suppliers, consultants and other service providers. Individuals/entities on ADB's anticorruption debarment list are ineligible to participate in ADB-financed activity and may not be awarded any contracts under the Project.<sup>16</sup>

66. To support these efforts, relevant provisions are included in the loan and project agreement and the bidding documents for the Project. The Government will comply with, and will ensure that PID complies with, ADB's Anticorruption Policy (1998, as amended to date). The Government, consistent with its commitment to good governance, accountability and transparency, agrees (a) that ADB has the right to investigate, directly or through its agents, any alleged corrupt, fraudulent, collusive or coercive practices relating to the project; and (b) to cooperate fully with any such investigation and to extend all necessary assistance. including providing access to all relevant books and records, as may be necessary for the satisfactory completion of any such investigation. In addition, the Government will (a) conduct periodic inspections on the contractors' activities related to fund withdrawals and settlements; (b) ensure that all contracts financed by ADB in connection with the project include provisions specifying the right of ADB to audit and examine the records and accounts of all contractors, suppliers, consultants, and other service providers as they relate to the project; and (c) the construction supervision consultant shall verify the contractors' invoices in accordance with working drawings and contract specifications.

<sup>&</sup>lt;sup>15</sup> Available at: <u>http://www.adb.org/Documents/Policies/Anticorruption-Integrity/Policies-Strategies.pdf</u>

<sup>&</sup>lt;sup>16</sup> ADB's Integrity Office web site is available at: <u>http://www.adb.org/integrity/unit.asp</u>

#### XI. ACCOUNTABILITY MECHANISM

67. People who are, or may in the future be, adversely affected by the project may submit complaints to ADB's Accountability Mechanism. The Accountability Mechanism provides an independent forum and process whereby people adversely affected by ADB-assisted projects can voice, and seek a resolution of their problems, as well as report alleged violations of ADB's operational policies and procedures. Before submitting a complaint to the Accountability Mechanism, affected people should make a good faith effort to solve their problems by working with the concerned ADB operations department. Only after doing that, and if they are still dissatisfied, should they approach the Accountability Mechanism.<sup>17</sup>

<sup>&</sup>lt;sup>17</sup> For further information see: <u>http://www.adb.org/Accountability-Mechanism/default.asp</u>.

68. All revisions/updates during course of implementation should retain in this Section to provide a chronological history of changes to implemented arrangements recorded in the PAM.

# Haveli, Kotli and Poonch Districts Portfolio

S.#	Name of Roads	District Link	Total Length (Km)	Affected Length (Km)	Rehabilitation Cost
1	Tatta Pani Hajira Road	Kotli-Poonch	19	19	380.00
2	Hajira - Abbaspur-Mahmood Gali road (Package-1 Hajira - Abbaspur)	Poonch-Haveli	46	16	300.00
3	Hajira - Abbaspur-Mahmood Gali road (Package-2 Abbaspur-Mahmood Gali)	Poonch-Haveli	46	30	600.00
4	Dhulli - Lasdanna - Mehmoodgali road (Dhulli - Lasdanna Package-1)	Bagh-Haveli	13	13	325.00
5	Dhulli - Lasdanna - Mehmoodgali road (Lasdanna - Mehmoodgali Package-2)	Bagh-Haveli	10	10	250.00
6	Rawalakot - Hajira road.	Poonch-Kotli & Haveli	30	24	480.00
7	Azad Pattan - Rawalakot road	Poonch-Rawalpindi	35	20	400.00
8	Trarkhel - Hajira road.	Sudhnuti-Poonch	17	17	340.00
9	Khaigala Ali Sojal Chura Gali Road.	Poonch	15	15	108.46
10	Thaliar Bridge Kotli to Tatta Pani Road (25.61Km)	Kotli	9.49	9.49	200.00
	Total Roads		240.49	173.49	3,383.46

# Major arterial roads for rehabilitation (Priority-1)

# District roads to repair topre-flood standard (Priority-1)

S.#	Name of Roads	District Link	Total Length (Km)	Affected Length (Km)	Rehabilitaion Cost
1	Abbaspur Chiri Kot Road.	Poonch	23	8	77.13
2	Mujahidabad Horna Mera Thalla Road.	Poonch	28	12	63.49
3	Mong Thorar Rawalakot Road.	Poonch	28	8	47.98
4	Rawalakot Singola Road.	Poonch	13	7	39.35
5	Rawalakot Thorar Road.	Poonch	10	5	31.75
6	Thorar Tain Road.	Poonch	14	6	28.06
7	Hajira Serari Road.	Poonch	12	4	25.74
8	Arja Rawalakot Road.	Poonch	21	1	13.71
9	Kotli to Serhota Samrore Road Length 14Km	Kotli	14	6	39.38
10	Kahutta Aliaabad Hajipir Khawaja BandiRoad (50 Km)	Haveli	50	1.2	44.54
11	Kahutta Khurishedabad Hellan Road Length 25 Km.	Haveli	25	1.02	40.44
12	Lasdana to HajipirLength 20 KM.	Haveli	20	0.62	29.66
13	Soli Kala Mula Road Length 16 KM.	Haveli	16	0.38	23.42
14	RChanjal Fathepur Kirni Naizapir Road Length 18 KM.	Haveli	18	0.033	15.68
15	Palangi ChirikotRoad Length 14 KM	Haveli	14	0.23	14.16
	Total		306.0	60.483	534.47

# Proposed bridges for rehabilitation

Sr.			Rehabilitaion	
No	Description	District	Cost	Remarks
1	Suspension Bridge Daghar over river Poonch span 305Rft	Kotli	50.00	Damaged beyond repair
2	Baily/Suspension Bridge Tatta Pani over river Poonch span 400Rft	Kotli	2.87	Partially damaged
3	Construction of RCC Bridge Kotli Tatapani road (Bypass slide intervention)	Kotli	200.00	Bypass slide intervention
4	Protection of Abutments Shamsi steel bridge kahutta, Baily bridge Chanjal, Steel bridge Chanjal, Steel bridge Tholanger, Baily bridge Khurisheabad, Suspension bridge Tangari, Suspension bridge Jhawara, and Suspension bridge soli over river battar	Haveli / Poonch	118.75	
5	Repair of 16 Nos RCC Bridges District Kotli	Kotli	60.58	
6	Protection work RCC bridge Hajira	Poonch	20.00	Substructure Partially damaged
	Total Bridges		452.20	

S.#	Name of Roads	District Link	Total Length (Km)	Affected Length (Km)	Rehabilitation Cost
1	Muzaffarabad - Brarkot road including 1.7 road tunnelat Lohargali Landslide.	Muzaffarabad-KPK	16	4Km Road+1.7km Tunnel	3,000.00
2	Trarkhel - Blouch - Sarsawa road (Section of Kashmir Trunk Road KTR)	Sudhnuti-Kotli	46	46	2,300.00
3	Kotli Gulpur Kerote (KGK) Road	Kotli-Rawalpindi	59	20	400.00
4	Plack Dudyal Dhan Gali	Mirpur-Rawalpinid	32	32	640.00
5	Azad Pattan - Rawalakot road	Poonch-Rawalpindi	35	20	400.00
6	Rawalakot - Hajira road.	Poonch-Kotli & Haveli	30	24	480.00
7	Hajira - Abbaspur - Kahutta road	Poonch-Haveli	65	65	1,300.00
8	Saran - Chikar - Sudhangali road	Hattian Bala- Bagh	30	30	600.00
9	Dhulli - Lasdanna - Mehmoodgali road	Bagh-Haveli	30	30	900.00
10	Tatta Pani Hajira Road	Kotli-Poonch	19	19	285.00
11	Kotli Pallandri Road	Kotli-Sudhnuti	45	33	900.00
12	Kahutta - Khursheedabad road	Haveli	15	15	450.00
13	Sarsawa Sehnsa Road	Kotli-Rawalpindi	23	23	315.00
14	Gulpur Narr Palak Road	Kotli-Mirpur	26	26	650.00
15	Rehibilation of Samahni Pir Gali Road	Bhimber-Kotli	34	34	680.00
16	Rehibilation of Bhimber Jatli Road	Bhimber-Mirpur	28	28	560.00
17	Trarkhel - Hajira road.	Sudhnuti-Poonch	17	17	340.00
18	Rehibilation of Bhimber Gujrat Road	Bhimber-Gujrat	8	8	200.00
	Total:		558	470	14,400.00

# List of All Damaged Major Roads

# List of all damaged roads in Haveli, Kotli and Poonch Districts

S.#	Name of Work /Roads	District	Total Length (Km)	Affected Length (Km)	Rehabilita -tion Cost
1	Thaliar Bridge Kotli to Tatta Pani Road Length 25.61Km	Kotli	25.61	9.49	363.97
2	Tatta pani Goi road Length 12Km	Kotli	12.00	0.24	2.02
3	Nakyal to Karaila Khuiratta Road Length 22Km	Kotli	22.00	0.76	7.94
4	Kotli to Nakyal Road Length 37Km	Kotli	37.00	0.73	16.87
5	Kotli Gulpur Kerote (KGK) Road Length 59Km	Kotli	59.00	3.00	33.53
6	Hajiabad to Choch Dadyal Road Length 15Km	Kotli	15.00	2.90	10.04
7	Sarsawa Balooch Road Length 10Km	Kotli	10.00	0.30	1.99
8	Sarsawa Sehnsa Road Length 21Km	Kotli	21.00	0.42	2.91
9	Kotli Pallandri Road Length 23Km	Kotli	23.00	0.45	6.14
10	Gulpur Narr Palak Road Length 26Km	Kotli	26.00	0.50	6.14
11	Tatta Pani Hajira Road Length 19Km	Kotli	19.00	0.76	11.94
12	Tatta Pani Sehera Mandri Madarpur road length 22km	Kotli	22.00	0.60	35.40
13	Kotli to Serhota Samrore Road Length 14Km	Kotli	14.00	6.00	39.38
14	Dandli Cross to Goi Road Length 12 Km	Kotli	12.00	0.64	2.02
15	Tatta Pani Kanoian Bagah Road Dinga Chatter Road (9km)	Kotli	9.00	0.54	7.02
16	Goi Sehni Batali Road Length 10Km	Kotli	10.00	0.45	8.10
17	Tahlair Bridge to Kakani Bagha Road Length 9Km	Kotli	9.00	1.18	21.47
18	Bhabra Link Road Length 3Km	Kotli	3.00	0.39	1.52
19	Kotli Bypass to Roli Road Length 1Km	Kotli	1.00	0.18	2.63
20	Janjoora to Karari Road Length 6Km	Kotli	6.00	0.51	4.41
21	Mohar Link Road Length 3.5Km	Kotli	3.50	0.39	4.60
22	Akbari Bridgeto Chowki Mong Road Length 4Km	Kotli	4.00	0.36	16.30
23	Raian Sharif to Darbar Road Length 1Km	Kotli	1.00	0.33	2.05
24	Pagwari to Guni Ghazian Road Length 4Km	Kotli	4.00	0.70	16.08
25	Dhanwan Gali to High School Dhanwan Length 1.5Km	Kotli	1.50	0.36	2.20
26	Pothi Gali to Turkundi Kallar Gala Road Length 8Km	Kotli	8.00	0.37	6.07
27	Mohra Narra Bala kot Dabsi Road Length 13Km	Kotli	13.00	0.34	7.57
28	Nakyal to Jandrote Dabsi Road Length 15Km	Kotli	15.00	0.58	7.24

S.#	Name of Work /Roads	District	Total Length (Km)	Affected Length (Km)	Rehabilita -tion Cost
29	Nakyal to Pirkalanger Road Length 8Km	Kotli	8.00	0.34	6.91
30	Nakyal to Mohra Road Length 10Km	Kotli	10.00	0.30	4.57
31	Nakyal to Sari Khandar Datote Road Length 13Km	Kotli	13.00	0.30	4.29
32	Nakyal Pothi Gali Gahorain Cross Road Length 7Km	Kotli	7.00	0.21	1.56
33	Link Road Banala Andhroth Bohail Road Length 13Km	Kotli	13.00	0.91	5.80
34	Jandrote Saloon Ninda Sandra Road Length 22Km	Kotli	22.00	0.60	11.84
35	Jandrote Nakhnal Dangali Baghlain Road Length 8Km	Kotli	8.00	0.27	3.75
36	Neeli Gali to Khad Gujrain Road Length 5Km	Kotli	5.00	0.12	1.69
37	Supply to Khad Gujran Road Length 4Km	Kotli	4.00	0.12	2.31
38	Potha to Anti Dewal Road Length 6Km	Kotli	6.00	0.54	14.99
39	Panjera to Siah Sharif Road Length 3Km	Kotli	3.00	0.12	1.81
40	Panjera to Odhey Sharif Road Length 4Km	Kotli	4.00	0.12	2.65
41	Sarsawa to Sagri Road Length 4Km	Kotli	4.00	0.09	1.66
42	Anohi Sarhota to Wahi Hill road Length 4.5Km	Kotli	4.50	0.09	2.79
43	Broian to Nain Sukh Road Length 4Km	Kotli	4.00	0.12	2.72
44	Broian to Adrad Sharif Road Length 7Km	Kotli	7.00	0.42	6.09
45	Choch Khatras Road Length 12Km	Kotli	12.00	0.39	11.75
46	Nar Mando to Suana Road Length 2Km	Kotli	2.00	0.15	3.12
47	Afzak Pur Nar Mando Road Length 5Km	Kotli	5.00	0.15	2.97
48	Tarain to Sihalian Road Length 6Km	Kotli	6.00	0.39	8.09
49	Barali to Chata Bridge to Doongi Sanote Road Length 6Km	Kotli	6.00	0.24	8.66
50	Karaitote to Ollagar Road Length 2Km	Kotli	2.00	0.18	2.41
51	Dogala to Bhirian Road Length 4Km	Kotli	4.00	0.27	4.93
52	Tehrayyer to Dakh Road Length 1Km	Kotli	1.00	0.12	0.99
53	Tehrayyer to Dehyyar Road Length 1Km	Kotli	1.00	0.12	2.77
54	Hollar To Chechan Azad Patten Road Length 6Km	Kotli	6.00	0.15	2.90
55	Hollar to Atkora Barral Road Length 6Km	Kotli	6.00	0.33	4.76
56	Khori to Tarala road Length 3Km	Kotli	3.00	0.09	1.23
57	Kalri to Kot Shahpal Road Length 3Km	Kotli	3.00	0.15	2.95
58	Potha to Jalu Gurjan Road Length 10Km	Kotli	10.00	0.27	4.46
59	Doongi to Jata Poth Road Length 10Km	Kotli	10.00	0.21	4.55
60	Seharmandi to Radda Darbar Road Length 5Km	Kotli	5.00	0.24	5.50
61	Kohali to Fagoosh Road Length 7Km	Kotli	7.00	0.12	4.16
62	Mohli to Kajlani Baradla road Length 25Km	Kotli	25.00	0.27	4.77
63	Kallar Colony to Jabrian Road Length 1Km	Kotli	1.00	0.15	3.67
64	Maneel to Kallar Colony road Length 2Km	Kotli	2.00	0.30	3.94
65	Gulpur to Tharochi Road Length 2Km	Kotli	2.00	0.27	3.94
66	Dhamal to Gahagra Road Length 1Km	Kotli	1.00	0.09	4.69
67	Pind Pailan Road length 2Km	Kotli	2.00	0.06	3.62
68	Bandli to Dargoti Bala Road Length 3.5Km	Kotli	3.50	0.12	11.81
69	Brote Gala to Sari Road Length 5Km	Kotli	5.00	0.12	4.40
70	Gahair to Sari Road Length 6Km	Kotli	6.00	0.15	5.47
71	Tali Stop to Bera Road Length 6Km	Kotli	6.00	0.45	27.66
72	Gohera to Balyal Road Length 2Km	Kotli	2.00	0.21	4.96
73	Gian to Kotla Road Length 7.5Km	Kotli	7.50	0.36	20.18
74	Syed Guhlam Shabir Shah Darba Road	Kotli	1.00	0.06	2.62
75	Dhanna Batal Khuiratta Chiri Road Length 5Km	Kotli	5.00	5.00	14.13
76	PCC Road Behail to Samlar Bazar road length 1500rft	Kotli	0.50	0.45	2.76
77	Chapiran to Kohmer road length 1.5Km	Kotli	1.50	0.45	1.44
78	PCC Chatar to Jajop Bahader road length 1Km	Kotli	1.00	0.45	2.76
79	Jabar Baroti to Jata road length 4.5Km	Kotli	4.50	4.50	13.29
80	Mai Toti Darbar to Sari Chatar Road length 8.5km	Kotli	8.50	8.50	25.11
81	Re. of Majota to jatta road length 1Km	Kotli	1.00	1.00	2.95
141	Lasdana Mahmood Gali Kahutta Road	Haveli	35.00	1.25	29.92
142	Palangi Naga NariRoad	Haveli	18.00	0.42	15.29
143	Chanjal Fathepur Kirni Naizapir Road	Haveli	18.00	0.35	15.68
144	Lasdana to Hajipir	Haveli	20.00	0.62	29.66
145	Kahutta Aliaabad Hajipir Khawaia Bandi Road	Haveli	50.00	1.20	53.00
146	Palangi Chirikot Road	Haveli	14.00	0.23	14.16
147	Soli Kala Mula Road	Haveli	16.00	0.38	23.42

S.#	Name of Work /Roads	District	Total Length (Km)	Affected Length (Km)	Rehabilita -tion Cost
148	Chanjal Degwar road	Haveli	10.00	0.19	6.34
149	Hashmi More to Badhal Sharif Bahatakot Sheru Dahara Road	Haveli	18.00	0.47	18.82
150	Kahutta Khurishedabad Hellan Road	Haveli	25.00	1.02	40.44
151	Mori Melvan Road	Haveli	2.00	0.33	3.00
152	Kahutta Kalsan Road	Haveli	2.00	0.17	7.99
153	Basan Road	Haveli	7.00	0.16	4.38
154	Patti Chirikot Gammay Shah Cross Road	Haveli	8.10	0.48	2.91
155	Dana Chaychain Road	Haveli	2.00	0.18	1.33
156	Hotter Bala Road	Haveli	2.00	0.15	1.03
157	Jabbi Syedain Road	Haveli	4.00	0.27	1.72
158	Dana Darbar Sharif Road	Haveli	1.00	0.16	1.10
159	Hallen Shamali to Mori Melvan Road	Haveli	1.50	0.09	2.21
160	Kahutta Kalali Road	Haveli	1.00	0.15	0.94
161	Kahutta Rankari Road	Haveli	1.00	0.13	0.87
162	Tachan to Naban Phalwari Road	Haveli	1.00	0.13	0.86
163	N.R.M.P to Zirin Chirikot Road	Haveli	2.00	0.25	0.97
164	Rankari Chohan Road	Haveli	1.50	0.12	1.10
165	Rankari Pain Road	Haveli	1.50	0.17	1.03
166	Chanjal Kala Simblo Road	Haveli	1.00	0.13	1.43
167	Hallen Janubi Jabbari Road	Haveli	1.00	0.06	1.75
168	Pallan Chaudryain Road	Haveli	1.00	0.05	0.90
169	Tholanger to Kangran Road	Haveli	1.00	0.06	1.77
170	Pathara Chroon Khori Road	Haveli	3.00	0.23	1.17
171	Badhal More to loyain Road	Haveli	1.00	0.09	0.47
172	Gugdar Paddar Road	Haveli	5.00	0.19	4.04
176	Dowarandi Abbaspur Road.	Poonch	20.00	5.00	70.06
177	Abbaspur Mehmood Gali Road.	Poonch	13.00	11.00	72.00
178	Abbaspur Chiri Kot Road.	Poonch	23.00	8.00	77.13
179	Chatra Tatrinot Madar Pur Road.	Poonch	15.00	7.50	62.68
180	Abbaspur Namjar Khali Draman Road.	Poonch	20.00	10.00	92.90
181	Kaiyan Ghamir to Donga Ghamir Road.	Poonch	12.00	9.00	56.30
182	Abbaspur Polas Troti Road.	Poonch	8.00	4.00	37.37
183	Abbaspur Chura Gali Road.	Poonch	10.00	2.00	28.84
184	Link Roads.	Poonch	64.00	13.00	203.38
185	Hajira Khaigala Road.	Poonch	10.00	-	9.89
186	Hajira Dowarandi Abbaspur Road.	Poonch	4.00	2.00	12.08
187	Hajira Tatta Pani Road.	Poonch	25.00	6.00	53.81
188	Hajira Serari Road.	Poonch	12.00	4.00	25.74
189	Hajira Pothi Chaprian Road.	Poonch	12.00	2.00	13.85
190	Hajira Akramabad Road.	Poonch	9.00	3.00	17.31
191	Hajira Davi Gali Road.	Poonch	6.00	2.00	13.06
192	Hajira Trarkhel Road.	Poonch	19.00	2.00	21.72
194	Rawalakot Thorar Road.	Poonch	10.00	5.00	25.75
195	Rawalakot Goin Nullah Azad Pattan Road.	Poonch	35.00	12.00	87.63
196	Goin Nullah to Mang Rawalakot road	Poonch	2.50	2.00	26.69
197	Rawalakot Arja Road.	Poonch	7.00	-	9.02
198	Rawalakot Shujabad Road.	Poonch	10.00	-	10.80
199	Rawalakot Singola Road.	Poonch	13.00	7.00	39.35
200	Rawalakot Khaigala Hajira Road.	Poonch	23.00	5.00	49.92
201	Rawalakot Ban Baik Road via Kaithan.	Poonch	12.00	8.00	45.74
202	Cherh Drake Hussain Kot Road.	Poonch	12.00	4.00	29.33
203	Khaigala Banjosa Trarkhel Road.	Poonch	20.00	7.00	51.93
204	Chota Gala Hussain Kot Road.	Poonch	6.00	3.00	17.91
205	Banjosa Jandali Road.	Poonch	5.50	1.50	12.00
206	Khaigala Ali Sojal Chura Gali Road.	Poonch	33.00	15.00	108.46
207	Khaigala Toli Peer Road.	Poonch	19.00	19.00	89.55
208	Link Roads.	Poonch	61.50	20.00	106.10
209	Mong Thorar Rawalakot Road.	Poonch	28.00	8.00	47.98
210	Thorar Tain Road.	Poonch	14.00	6.00	28.06
211	Arja Rawalakot Road.	Poonch	21.00	1.00	13.71

S.#	Name of Work /Roads	District	Total Length (Km)	Affected Length (Km)	Rehabilita -tion Cost
212	Arja Tain Dhalkot Road.	Poonch	24.75	-	7.50
213	Mujahidabad Horna Mera Thalla Road.	Poonch	28.00	12.00	63.49
214	Jhola Naar Cross to Paniola Road.	Poonch	9.00	2.00	10.72
215	Jhola Naar Datot Barien Road.	Poonch	9.00	2.00	13.02
216	Mujahidabad Chapri Road.	Poonch	8.00	3.00	15.51
217	Shaheed Gala Goin Nullah Road.	Poonch	6.75	3.00	13.86
218	Androat Mong Road.	Poonch	4.00	1.50	7.07
219	Rehara Sawa Mong Road.	Poonch	5.00	3.00	14.88
220	Bosa Gala Barien Road.	Poonch	7.00	-	3.15
	Total		1,693.71	315.07	3,070.23

# **Punjab Province Roads Portfolio**

List of provincial roads (Amount Pak Rupees in million)

				Procureme	nt Status
Sr.			Total		In
No.	Name of affected Road	District	Damage	Completed	Process
1	Rawalpindi Chirah Kotli Sattian Kulyari Road	Rawalpindi	39.98	4.50	35.48
2	Rawalpindi Kahuta Punjar Azad Pattan Road (Section	Rawalpindi	5.00	5.00	-
	Kahuta to Azad Pattan, Km 38 to 69)				
3	Kahuta Karot Road	Rawalpindi	21.65	21.65	
4	Rawalpindi Murree Kashmir Road	Rawalpindi	2.00	2.00	-
5	Kuldana Barrian Road	Rawalpindi	0.20	0.20	-
6	Construction of road from Patriata to Dhirkot Kethwalan	Rawalpindi	5.00	5.00	
7	Construction of Kotli Sattian Dhanda Road Tehsil Kotli Sattian	Rawalpindi	12.64	12.64	
8	Rehabilitation of road from Lower Topa (Danna) to Gulehra Gali to Patriata Top	Rawalpindi	5.94	5.94	
9	P.D. Khan Lilla Road	Jhelum	-		-
10	Kot Jaffer to Nallah Pulkhu	Gujranwala	1.00	1.00	
11	Kot Hara to Jalalpur Bhattian road	Hafizabad	2.88	2.88	
12	Hafizabad to Vanike Road	Hafizabad	0.84	0.84	-
13	Gujranwala-Hafizabad road	Hafizabad	10.12	10.12	
14	Sialkot Pasrur road	Sialkot/Narowal	-		-
15	Sialkot-Kingra-Zafarwal road	Sialkot/Narowal	5.33	5.33	-
16	Daska Pasrur road.	Sialkot/Narowal	115.31		115.31
17	Bridge over River Tavi	Sialkot/Narowal	178.07	4.07	174.00
18	Pasrur – Narowal Road	Sialkot/Narowal	85.90	0.88	85.02
19	Bhadiana Chawinda Zafarwal Road	Sialkot/Narowal	2.08	2.08	-
20	Pasrur Throw Mandi Kingra Road	Sialkot/Narowal	42.36		42.36
21	Moutra Badiana Road	Sialkot/Narowal	75.72		75.72
22	Jhang – Sargodha road	Jhang	0.61	0.61	-
23	Faisalabad – Sargodha road via Chiniot	Jhang	0.23	0.23	-
24	Sial More Rattapur Ahmad Nagar Langer Makhdoom	Jhang	0.30	0.30	-
25	Bridge over River Chenab at Bhowana i/c approaches	Jhang	33.61	33.61	
26	Lahore – Jaranwala – Faisalabad – Jhang – Bhakkar road	Jhang	1.98	1.98	-
27	Jhang Bypass road	Jhang	0.05	0.05	-
28	Link road Sargodha road to Chiniot road via pakkay wala road	Jhang	0.20	0.20	-
29	18 Hazari Fateh Pur road	Jhang	2.85	2.85	-
30	Garh Maharaja – Layyah road	Jhang	0.14	0.14	-
31	Khushab – M/Garh road	Jhang	1.44	1.44	-
32	Construction of bridge over River Ravi at Qutab Shahana,	Sahiwal	3.34	3.34	
	Total Provincial Roads		656.75	128.86	527.89

## List of district roads (Amount in Pak Rupees Million)

				Procurem	ent Status
Sr. No.	Package Name	District Name	Total Damage	Comp- leted	In Process
1	Restoration of Jhang Road Adda Kup to Muhammadi Sharif via Thatha Qureshian Sambhal Tehsil Bhowana District Chiniot (L=11.60 Km)	Chiniot	4.25	4.25	
2	Restoration of Jamia Abad to Amin Pur Tehsil Bhowana District Chiniot (L=2.50 Km)	Chiniot	8.09	8.09	
3	Restoration of Langar Makhdoom to Mianwal Road Tehsil Lalian District Chiniot (L=1.50 Km)	Chiniot	3.41	3.41	
4	Restoration of Flood damaged Road Chiniot Jhang Road at Sherabad to Suleman Tehsil Bhowana District Chiniot (L=2.60 Km)	Chiniot	1.07	1.07	
5	Restoration of Flood damaged Road Ramzan Sugar Mill to Muhammadi Shareef Tehsil Bhowana District Chiniot (L=1.79 Km)	Chiniot	1.98	1.98	
6	Restoration of Flood damaged Road Main Jhang-Chiniot Road to D.C via Samudri Road Tehsil Bhowana District Chiniot	Chiniot	1.27	1.27	
7	Restoration of Flood damaged Road Chiniot Jhang Road to Mouza Baggha Tehsil Bhowana District Chiniot (L=5.65 Km)	Chiniot	3.42	3.42	
8	Restoration of Flood damaged Road Chiniot Jhang Road Nalka Adda to Thatta Muhammad Shah, Maral wala Tehsil Bhowana District Chiniot (L=6.80 Km)	Chiniot	5.06	5.06	
9	Restoration of Flood damaged Road Jamia abad to Muhammad Shareef Theisl Bhowana District Chiniot (L=3.42 Km)	Chiniot	1.42	1.42	
10	Restoration of Flood damaged Road Adda Sammundar to Sammundar Tehsil Bhowana District Chiniot (L=2.00 Km)	Chiniot	2.22	2.22	
11	Restoration of Flood damaged Road Bhowana to Noshera Tehsil Bhowana District Chiniot (L=13.3 Km)	Chiniot	1.84	1.84	
12	Restoration of Flood damaged Road Jand Wala Aminpur Road at Hid to Jani Shah Idlana Road via Hussain kay & Purana Pind Khokhran, Tehsil Bhowana District Chiniot (L=9.5 Km)	Chiniot	1.23	1.23	
13	Restoration of Flood damaged Road Pango Aminpur Road to Bhoien Pull to Abadi Abid Imam Shah, Tehsil Bhowana District Chiniot (L=100 RFT)	Chiniot	1.92	1.92	
14	Restoration of Flood damaged Road Jamia abad to Noshera, Tehsil Bhowana District Chiniot (L=6.6 Km)	Chiniot	1.53	1.53	
15	Restoration of Flood damaged Road Dharota to Idlana Moranwala, Thattah Fateh Ali, Tehsil Bhowana, District Chiniot (L=3.3 Km)	Chiniot	2.23	2.23	
16	Restoration of Flood damaged Road Salara Qazian Road Tehsil & District Chiniot (L=1.84 Km)	Chiniot	1.17	1.17	
17	Restoration of Flood damaged Road Chiniot Pindi Bhattian Road to Murad Wala Tehsil & District Chiniot (L=1.40 Km)	Chiniot	2.48	2.48	
18	Restoration of Flood damaged Road Mouza Qazian to Kot Roshan Tehsil & District Chiniot (L=1.70 Km)	Chiniot	2.30	2.30	
19	Restoration of Flood damaged Road Adda Barkhurdar to Barkhurdar Road Tehsil Lalian District Chiniot (L=1.93 Km)	Chiniot	3.29	3.29	
20	Restoration of Flood damaged Road Dirkhanawala to Thatha Nabuka Road Tehsil Lalian District Chiniot (L=2.60 Km)	Chiniot	2.08	2.08	
21	Restoration of Flood damaged Road Dirkhanawala Road to Khizar kay Tehsil Lalian District Chiniot (L=3.00 Km)	Chiniot	6.45	6.45	
22	Restoration of Flood damaged Road Haji Usman to Waday Shah Road Tehsil Lalian District Chiniot (1.40 Km)	Chiniot	3.13	3.13	
23	Restoration of Flood damaged Road Sangra to Yarekey Tehsil Lalian District Chiniot (L=1.30 Km)	Chiniot	1.04	1.04	
24	Restoration of Flood damaged Road Safina Sugar Mills to Dera D.C Road Tehsil Lalian District Chiniot (L=0.18 Km)	Chiniot	3.98	3.98	
25	Restoration of Flood damaged Road Lalian Kandiwal Bahiwal Road (construction of pile foundation bridge) Tehsil Lalian District	Chiniot	10.41		10.41

				Procurem	ent Status
Sr.		District	Total	Comp-	In
No.	Package Name	Name	Damage	leted	Process
	Chiniot				
26	Restoration of Flood damaged Road Changranwala to Kheruana Tehsil Lalian District Chiniot (L=0.74 Km)	Chiniot	1.60	1.60	
27	Restoration of Flood damaged Road Hersa Sheikh to Janghar Glotran Road Tehsil and District Chiniot (L=2.50 Km)	Chiniot	1.05	1.05	
28	Restoration of Flood damaged Road Kot Miana to Kot Roshan Road Tehsil and District Chiniot (L=2.01 Km)	Chiniot	1.16	1.16	
29	Rehabilitation of causeway on Pira Saghar Road UC Saghar Tehsil Talagang	Chakwal	1.05	1.05	
30	Rehabilitation of causeway on Shah Muhammad Wali – Larrian Road UC Jabbi Shah Dilawar Tehsil Talagang	Chakwal	2.87	2.87	
31	Rehabilitation of Umarwall Link Road	Gujrat	3.05	3.05	
32	Rehabilitation of road from Shahbaz Pur road Jalalpur Jattan	Gujrat	1.01	1.01	
33	Rehabilitation of road from Khasa to Chak Ikhtiar	Gujrat	4.73	4.73	
34	Rehabilitation of Pejoki Link Road	Gujrat	1.93	1.93	
35	Rehabilitation of Sada Chak Road	Gujrat	3.00	3.00	
36	Rehabilitation of Miani Chechian road	Gujrat	1.64	1.64	
37	Rehabilitation of road from Bhangranwala to Dhukhowa	Gujrat	4.95	4.95	
38	Rehabilitation of road from old G.T Road to Halsi Nullah	Gujrat	9.60	9.60	
39	Rehabilitation of Dhalli Nullah near village Malikpur	Gujrat	3.00	3.00	
40	Rehabilitation of road from Gujrat Sargodha Road to Mughlan Da Lok Shah Rodu Dhoop Sarri	Gujrat	4.66	4.66	
41	Rehabilitation of Biddar Marjan Doga Road	Gujrat	24.02	24.02	
42	Rehabilitation of Bridge Nullah Bhunder near Sahuntra Kotla Jalalpur Sobtian Road including High Level Bridge on Sabour Nagrian Road.	Gujrat	25.99	25.99	
43	Rehabilitation of High Level Bridge on Sabour Nagrian Road	Guirat	38.89	38.89	
44	Rehabilitation of Kotla Sadwal Maira Road via Choor Chak	Guirat	21.79	21.79	
45	Rehabilitation of Guliana Kotla Road (Guliana to Manglia More)	Gujrat	9.40	9.40	
46	Rehabilitation of Chandala to Gill Road	Gujrat	5.33	5.33	
47	Rehabilitation of old G.T Road Sarai Alamgir	Gujrat	11.74	11.74	
48	Rehabilitation of road from Qasba Karyali near village Bawli	Gujrat	1.02	1.02	
49	Rehabilitation of road from Qasba to Sarai Alamgir Road	Gujrat	15.46	15.46	
50	Rehabilitation of Dera Besian Link road	Gujrat	1.76	1.76	
51	Rehabilitation of road from Peer Khana Dehra Road	Gujrat	33.96	33.96	
52	Rehabilitation of Besa Bolani Road	Gujrat	1.26	1.26	
53	Rehabilitation of road from Head Jaggu Kirnara Lass Road	Gujrat	2.74	2.74	
54	Rehabilitation of road from Head Jaggu road to Pothi Mera	Gujrat	15.73	15.73	
55	Rehabilitation of Sarai Alamgir Jalalpur Sobtian road	Gujrat	24.66	24.66	
56	Rehabilitation of road from Tanda to Surkhpur	Gujrat	2.30	2.30	
57	Rehabilitation of Karianwala to Tanda road (Bridge Dawara Nullah)	Gujrat	8.66		8.66
58	Rehabilitation of University of Gujrat Byepass Road	Gujrat	2.10	2.10	
59	Rehabilitation of road from Dhilu Gharbi	Gujrat	5.13	5.13	
60	Rehabilitation of Tanda City Road (Construction of 2 Span 10' Each Culvert)	Gujrat	5.04	5.04	
61	Rehabilitation of road in village Surkhpur.	Gujrat	39.74	39.74	
62	Rehabilitation of road from Surkhpur to Najan Road	Gujrat	19.70	19.70	
63	Rehabilitation of road from Karianwala to Ajnala road	Gujrat	5.83	5.83	
64	Rehabilitation of road from Karianwala to Dheenda Jalalpur Sobtian road	Gujrat	22.53	22.53	
65	Rehabilitation of road from Mangowal Byepass	Gujrat	8.12	8.12	
66	Rehabilitation of road from G.T Road to Shadiwal via Saman i/c Goraya link	Gujrat	3.95	3.95	
67	Rehabilitation of road from Trikha Bridge to Kot Ghulam	Guirat	6.14	6.14	
68	Rehabilitation of road from 11-R Rajbah to Jahangirpur to Bagrianwala road via Juliani	Gujrat	8.21	8.21	
69	Rehabilitation of road from Jamo Bola to Kang Sehali	Guirat	4.01	4.01	
70	Rehabilitation of Seekarwali link Road	Guirat	7.82	7.82	
71	Construction of High Level Bridge 2 Span 30' Each Dinga	Gujrat	9.18	9.18	

				Procurem	ent Status
Sr.		District	Total	Comp-	In
No.	Package Name	Name	Damage	leted	Process
72	Chellanwala road (Raja Pur) Rehabilitation of Mirza Tabir Road	Guirat	18 54	18 54	
73	Rehabilitation of road from Jhand to Kisana	Gujrat	7.88	7.88	
74	Rehabilitation of road from Lalamusa Dinga Road to Subhan	Gujrat	20.15	20.15	
75	Rehabilitation of Road from Chak Bhatti More to Vanike Tarrar. L= 27.45 Kms	Hafizabad	48.58	48.58	
76	Rehabilitation of Road from Qadirabad Colony to Kot Saleem & Kot Saleem to Jalalpur Qadirabad road via Kot Buksh L= 7.50 Kms	Hafizabad	12.31	12.31	
77	Rehabilitation of Road from Vanike Tarar to Ramke Chatta road. L= 7.50 Kms	Hafizabad	12.16	12.16	
78	Rehabilitation of Road from Beriwala to Hussainpura L= 1.70 Kms	Hafizabad	4.16	4.16	
79	Rehabilitation of Road from Ragho Sayedan to Dhariwal L= 4.90 Kms	Hafizabad	2.18	2.18	
80	Rehabilitation of Road from Kor Qadirbuksh to Kot Kameer L= 2.13 Kms	Hafizabad	2.10	2.10	
81	Rehabilitation of Road from village Trigra to village Kot Jafar L=1.40 Kms	Hafizabad	3.00	3.00	
82	Rehabilitation of Road from Bridge Rajbah to Qadirabad road via Bhari Chatta link road. L= 1.35 Kms	Hafizabad	3.93	3.93	
83	Rehabilitation of Road from Jalalpur Qadirabad road Kot Ishaque to Behak Ahmad Yar & Behak Ahmad Yar to Vanike Tarar Yar via Rubber Tarrar. L= 8.95 Kms	Hafizabad	27.22	27.22	
84	Rehabilitation of Road from Jalalpur Qadirabad road to Kot Mian via Ala-ud-din Ke Chatta L= 4.60 Kms	Hafizabad	4.49	4.49	
85	Rehabilitation of Road from Khanpur to Chak Bhatti L= 5.00 Kms	Hafizabad	14.77	14.77	
86	Rehabilitation of Road from Vanike Tarrar to Kot Jan Muhammad L= 2.32 Kms	Hafizabad	2.66	2.66	
87	Rehabilitation of Road from Khanpur Muzaffar Nau road, to Dariwal bridge i/c link to Chenaywali. L= 4.30 Kms	Hafizabad	1.87	1.87	
88	Rehabilitation of Road from Thatti Anoke Singh to Kot Bakhtawar. L= 4.57 Kms	Hafizabad	6.98	6.98	
89	Rehabilitation of Road from Jalalpur Qadirabad road Km 15 to Balake Makhdooman via Baleke Nau L= 3.70 Kms	Hafizabad	3.43	3.43	
90	Rehabilitation of Road from Qadirabad road to Channi Gulla via Nakki Chatta L= 3.70 Kms	Hafizabad	4.30	4.30	
91	Rehabilitation of Road from Jalalpur Qarrabad road (Thatti Anoke singh) to Kot Peer Muhammad via Ala-ud-din ke i/c Link Joura Khooh. L= 5.70 Kms	Hafizabad	6.37	6.37	
92	Rehabilitation of Road from Graveyard (nawabpura) to abadi Maira Vanike Tarar. L= 2.10 Kms	Hafizabad	3.86	3.86	
93	Rehabilitation of Road from Balake Nau to Kasranwali & Muzaffar Kohna L= 4.60 Kms	Hafizabad	3.81	3.81	
94	Rehabilitation of Road from Khanpur Chak Bhatti road to Balake Nau. L= 1.36 Kms	Hafizabad	1.40	1.40	
95	Rehabilitation of Road from Jalalpur Bhattian Qadirabad road to rajatarrar L= 6.45 Km	Hafizabad	11.99	11.99	
96	Rehabilitation of Road from Village Vanike Tarrar to Bari Tarrar via Asadullah Pur, Kot Peer Muhammad. L= 9.37 Kms	Hafizabad	13.27	13.27	
97	Rehabilitation of Road from Jalalpur Qadirabad road Km 20 to Chak Bhatti via Mehdiabad. L= 6.10 Kms	Hafizabad	23.66	23.66	
98	Rehabilitation of Road from Jalalpur Qadirabad road to Village Kahlowan via Village Thattah Panah L= 1.79 Kms	Hafizabad	1.20	1.20	
99	Rehabilitation of Road from Kot Saleem to Kot Mian. L= 4.00 Kms	Hafizabad	4.06	4.06	
100	Re-construction of Pile foundation bridge over Kot Nakka Branch near BHU Muradian.	Hafizabad	5.16	5.16	
101	Rehabilitation of Pindi Bhattian Talibwala Pattan Road. L= 6.84 Kms	Hafizabad	16.18	16.18	
102	Rehabilitation of Road from Jalapur Bhattian to Village Marth L=	Hafizabad	20.15	20.15	

				Procurem	ent Status
Sr. No.	Package Name	District Name	Total Damage	Comp- leted	In Process
	8.06 Kms		g•		
103	Rehabilitation of Road from Tahli Goraya to Marth L= 16.35 Kms	Hafizabad	28.18	28.18	
104	Rehabilitation of Gujranwala Hafizabad Pindi Bhattian road Km No.94 (Mile 59) to Chohdo Ahmed Yar L= 1.73 Kms	Hafizabad	4.22	4.22	
105	Rehabilitation of Road from Pindi Bhattian to Qila Murad Buksh i/c link to Fly Over Bridge L= 6.40 Kms	Hafizabad	15.98	15.98	
106	Rehabilitation of Road from Qila Murad Bukhsh to Dinga L= 3.00 Kms	Hafizabad	5.33	5.33	
107	Rehabilitation of Road from Missing link Naborara L= 2.78 Kms	Hafizabad	3.33	3.33	
108	Rehabilitation of Road from Jalalpur to Kot Ghazi road L= 9.41 Kms	Hafizabad	23.49	23.49	
109	Rehabilitation of Road from GHP road to Kot Ghazi road via Watwanwala & Kudlathi L= 7.78 Kms	Hafizabad	15.06	15.06	
110	Rehabilitation of Road from Ghari Gondal to Mahiwal i/c link to Ghari Gola L= 5.98 Kms	Hafizabad	7.60	7.60	
111	Rehabilitation of Road from GHP road to chohdo Khonian i/c link Samandar Khooh. L= 2.70 Kms	Hafizabad	2.41	2.41	
112	Rehabilitation of Road from LSS road to Pattan road via Dhappar Mallah. L= 3.99 Kms	Hafizabad	7.83	7.83	
113	Rehabilitation of Road from Qila Murad Bukhsh road to Bagh Kohna road via Dolo Kalan, Khurd & Kot Nizam. L=3.00 Kms	Hafizabad	4.89	4.89	
114	Rehabilitation of Road from Ghari Gola road to Lodheray Khurd. L= 0.91 Kms	Hafizabad	1.52	1.52	
115	Rehabilitation of Road from Mahewal road to Channi Raja. L= 1.13 Kms	Hafizabad	1.96	1.96	
116	Rehabilitation of Road from Chak Bhatti to Choora. L= 3.48 Kms	Hafizabad	8.38	8.38	
117	Rehabilitation of Road from Chaniot road to Pattan road. L= 1.60 Kms	Hafizabad	1.81	1.81	
118	Rehabilitation of Road from Khuram Churaira to Qila Murad Bukhsh via Lodheray. L= 5.20 Kms	Hafizabad	10.22	10.22	
119	Rehabilitation of Road from Jalalpur to Mehmoodpur i/c Bye Pass. L= 7.17 Kms	Hafizabad	12.12	12.12	
120	Rehabilitation of Road from Channi Arian (Jalalpur road) to Pindi Bhattian Qila Murad Bux road via Bagh Kohna. L= 6.23 Kms	Hafizabad	11.88	11.88	
121	Rehabilitation of Road from Chak Bhatti to Mehmoodpur via Chani Thatlan. L= 5.30 Kms	Hafizabad	5.11	5.11	
122	Rehabilitation of Road from Garhi Gondal to Kot Alam Khurd via Ghari Abdullah i/c missing portion. L= 4.29 Kms	Hafizabad	5.63	5.63	
123	Rehabilitation of Road from Jalalpur Qadirabad road Hakeemwal to Nissowal i/c missing portion. L= 7.20 Kms	Hafizabad	13.51	13.51	
124	Rehabilitation of Road from Chuchak to Miza Bhattian. L= 4.21 Kms	Hafizabad	10.18	10.18	
125	Rehabilitation of Road from Khuram Charera to Khuram Lodhi via Darbar Peer Hazrat Hayat Shah i/c missing portion. L= 5.21 Kms	Hafizabad	3.09	3.09	
126	Rehabilitation of Road from LSS road to Thada Bhattian. L= 5.71 Kms	Hafizabad	7.88	7.88	
127	Rehabilitation of Road from G.H.P road (Tahli Goraya) to Thatta Jahid Amirwala. L= 4.75 Kms	Hafizabad	4.43	4.43	
128	Rehabilitation of Road from Pindi Bhattian to Sargodha road i/c link Kot Dilawar & Degree Collages L= 5.57 Kms	Hafizabad	4.76	4.76	
129	Rehabilitation of Road from G.H.P road K.M.93 to Chodho Khuda Yar. L= 2.40 Kms	Hafizabad	4.12	4.12	
130	Rehabilitation of Road from G.H.P road to village Jassoke. L= 1.00 Kms	Hafizabad	4.89	4.89	
131	Rehabilitation of Road G.HP road to Tahtha Mona Salabat and Dera Nekukara. L= 3.00 Kms	Hafizabad	1.32	1.32	
132	Rehabilitation of Road from G.H.P Road to Thatha Asalat. L= 1.57 Kms	Hafizabad	4.60	4.60	
133	Rehabilitation of Road from Pindi Bhattian Chiniot road to Behramkay. L= 3.20 Kms	Hafizabad	6.48	6.48	
134	Rehabilitation of Road from Kot Ghazi to Burj Fatoo. L= 2.01 Kms	Hafizabad	1.14	1.14	

				Procurement Status	
Sr. No.	Package Name	District Name	Total Damage	Comp- leted	In Process
135	Rehabilitation of Road from Burj Masti to Ghari Gola. L= 1.75 kms	Hafizabad	2.99	2.99	
136	Rehabilitation of Road from Jalalpur Marth road to Bhoon Fazal via Kot Pehlwan i/c Link Bhoon Ratta L= 2.40 Kms (K.M. 5.25 to 7.65) & Old Lari Adda to Saim Nallah Bridge Jalalpur Bhattian L=0.26 kms (Total L=2.66 kms)	Hafizabad	16.16	16.16	
137	Rehabilitation of Road from Ramke to Chak Ghazi & Chak Ghazi to Kookanwal L= 6.30 Kms	Hafizabad	7.15	7.15	
138	Rehabilitation of Road from Narianwala to Uduke via village Kakou Khoo, Innooh Khooh L= 6.70 Kms	Hafizabad	6.18	6.18	
139	Rehabilitation of Road from Hafizabad Vanike Tarrar road tomanget Neecha via Nadala Kaham, Muradian along Kot Nakka Branch L= 15.40 Kms	Hafizabad	35.03	35.03	
140	Rehabilitation of Road from Hafizabad Mini By-pass road Mile 33 (Km No.53) GHP road to Hafizabad Vanike Tarrar road Mile NO.3 (K.M. NO.4) L= 3.72 i/c Link Raja Chowk to Mini By-pass L=2.20Kms.,DHQ to Mini By-pass L=2.20Kms. & Railway Line Graveyard to By-pass L=1.00Kms. L= 9.12 Kms.	Hafizabad	22.67	22.67	
141	Rehabilitation of Road from GHP road Mile 29 to Sagar Head Works. L= 4.05 Kms	Hafizabad	4.23	4.23	
142	Rehabilitation of Road from Hafizabad Sheikhupura road to Ghania village L= 2.99 Kms	Hafizabad	2.81	2.81	
143	Rehabilitation of Road from Aliabad to Fatehpur via Maniawala, Ballo Kohna i/c link Cheney. L= 7.70 Kms	Hafizabad	4.44	4.44	
144	Rehabilitation of Road from Bhatta Oddan to Manianwala via Narozpur, Nawan Shehr i/c Link to Bhoopy. L= 6.55 Kms	Hafizabad	3.64	3.64	
145	Rehabilitation of Road from Head Sagar to Muradian via Ahmad Pur. L= 4.65 Kms	Hafizabad	5.26	5.26	
146	Rehabilitation of Road from Village Jamowala to village Ghanian Kalan via Ghanian Khurd L= 3.10 Kms	Hafizabad	3.28	3.28	
147	Rehabilitation of Road from Vanike road to Ramke road along AKN Drain. L= 2.30 Kms	Hafizabad	6.42	6.42	
148	Rehabilitation of Road from Kot Mubarak Channi Hanjrawan road Km 10 to Kolo Tarar Akkanwala road along Gajor Gola Minor. L= 5.73 Kms	Hafizabad	1.99	1.99	
149	Rehabilitation of Road from GHP road to Jagg Bhatti. L= 1.80 Kms	Hafizabad	4.91	4.91	
150	Rehabilitation of Road from Rasoolpur to Mateke via Pind Pattli (Darbar Hazarat Sheik Farid) Vill Matteke. L= 7.45 Kms	Hafizabad	14.83	14.83	
151	Rehabilitation of Road from Sukheke - Marh Balouchan road. L= 10.46 Kms	Hafizabad	25.45	25.45	
152	Rehabilitation of Road from Barseer Ittelah to Mouza Khatarani. L= 4.35 Kms	Hafizabad	7.60	7.60	
153	Rehabilitation of Road from Tibba Shah Behlol to Beranwala,. L= 12.00 Kms	Hafizabad	16.69	16.69	
154	Rehabilitation of Road from Pindi Bhattian to Kot Nakka via Phatteke. L= 5.40 Kms	Hafizabad	11.28	11.28	
155	Rehabilitation of Road from Kot Sarwar to Dhoatta Azmat via Rattay L= 7.25 Kms	Hafizabad	19.12	19.12	
156	Rehabilitation of Road from Dohatta Azmat to Wadror via Janglay. L= 3.60 Kms	Hafizabad	8.09	8.09	
157	Rehabilitation of Road from Bhobra to Chah Anna road. L= 10.80 Kms	Hafizabad	24.71	24.71	
158	Rehabilitation of Road Mirza Bhansinka to Thatta Kherumatmal. L= 6.70 Kms	Hafizabad	13.36	13.36	
159	Rehabilitation of Road from Tibba Shah Behlol Beranwal road to Pindi Bhattian Beranwala road via Chak No.1&2. L= 7.20 Kms	Hafizabad	10.76	10.76	
160	Rehabilitation of Road from Jalalpur Qadirabad to Pindi Sudrana. L= 1.16 Kms	Hafizabad	3.65	3.65	
161	Rehabilitation of Road from Gujranwala Hafizabad road to Kassoke (Sec; Dhunni to Kassoke Via Vinni Laveray). L=17.00	Hafizabad	21.68	21.68	

				Procurement Status	
Sr.	Declary, News	District	Total	Comp-	In
NO.	Package Name	Name	Damage	leted	Process
162	Rehabilitation of Jurian to Kassoke Shamir Dinga road. L=6.25 kms	Hafizabad	7.75	7.75	
163	Rehabilitation of Road from Khangah Dogran Hafizabad road to Kassoke via Hinjranwala Shamir Dinga road. L=7.50 kms	Hafizabad	8.49	8.49	
164	Rehabilitation of Nonaana Khangah Dogran road. L=12.35 kms	Hafizabad	25.02	25.02	
165	Rehabilitation of Road from Alipur Hafizabad road K.M.No.12 to Chak Awanan via Gajar Gola Railway station and Kalairwala. L=5.30 kms	Hafizabad	5.68	5.68	
166	Rehabilitation of Alipur Hafizabad road. L=14.30 kms	Hafizabad	14.70	14.70	
167	Rehabilitation of Road from Gujranwala Hafizabad road to Sioke via Jaidke L=6.00 kms	Hafizabad	5.05	5.05	
168	Rehabilitation of Road from Railway Station road (Dr. Akram Hospital) to Saim Nallah via Bijli Mohallah. L=0.80 kms	Hafizabad	6.03	6.03	
169	Rehabilitation of Road from Dual Railway crossing to Ghari Ghous & Sagar road to Defence road Thela road i/c Link GHP road at Sohna Service Station. L=3.55 kms	Hafizabad	17.53	17.53	
170	Rehabilitation of Road from Burj Fateh Ali to Jhalar Dewana Papa Nagri L=2.75 kms	Hafizabad	4.25	4.25	
171	Rehabilitation of Road from Ghanian Kalan road to Kassoke road via Borianwala L=4.25 kms	Hafizabad	1.33	1.33	
172	Rehab./Repair of Road from Magasi Chowk to Kholra Mighiana (Length:1.10 Km) Tehsil Jhang	Jhang	1.00	1.00	
173	Rehab./Repair of Road from Adda Rajaabad to Jogera, Tehsil Jhang, L=1.30 Km	Jhang	1.74	1.74	
174	Rehab./Repair of Road from School Khanuana to Abadi Sharifabad, Tehsil Jhang, L=5.70 Km	Jhang	4.00	4.00	
175	Rehab./Repair of Road from Abadi Sultan Pur to Kirlan Wala, Tehsil Jhang, L=1.90 Km	Jhang	3.02	3.02	
176	Rehab./Repair of Road from Sargodha Road to Khana Bati, Tehsil Jhang L=0.83 Km	Jhang	2.89	2.89	
177	Rehab./Repair of Road from Sargodha Road to Abadi Afzal Borana, Tehsil Jhang L=0.50 Km	Jhang	1.90	1.90	
178	Rehab./Repair of Road from Jhang Sargodha Road to Abadi Ahmad Ali Khokar, Rehab./Repair of Road from Tehsil Jhang L=0.90 Km	Jhang	2.43	2.43	
179	Rehab./Repair of Road from Gherry Bhan to Dhedoana, Tehsil Jhang L=1.06 Km	Jhang	5.89	5.89	
180	Rehab./Repair of Road from Sargodha road Sunder Hotel to Abadi Allah Ditta Noul, Tehsil Jhang L=1.50 Km	Jhang	2.75	2.75	
181	Rehab./Repair of Road from Hermal Pur to Kholra Malah,Tehsil Jhang, L=0.66 Km	Jhang	1.56	1.56	
182	Rehab./Repair of Road from Ballu Shahbal to Sargodha Road Via Kurrianwala, Tehsil Jhang Length:8.90 KM	Jhang	22.27	22.27	
183	Rehab./Repair of Road from Budhuana to 5 Marla colony, Uppth Janjiana, Tehsil Shorkot L=2.25 Km	Jhang	6.64	6.64	
184	Rehab./Repair of Road from Rehab./Repair of Road from Basti Dad to Maghywala, Tehsil Shorkot L=0.60 Km	Jhang	2.33	2.33	
185	Rehab./Repair of Road from 5 Marla Colony to Basti Rasheed, Tehsil Shorkot, Length:1.00 KM	Jhang	2.12	2.12	
186	Rehab./Repair of Road from Jetha More to Basti Qadir Pur, Tehsil Jhang L=1.10 Km	Jhang	3.39	3.39	
187	Rehab./Repair of Road from Salyana to Kot Sahib, Tehsil Jhang L=2.50 Km	Jhang	8.41	8.41	
188	Rehab./Repair of Road from Pir Kot to Basti Malkani, Tehsil Jhang L=1.50 Km	Jhang	7.28	7.28	
189	Rehab./Repair of Road from Massan to Chah Gul Wala, Tehsil Jhang L=1.00 Km	Jhang	2.05	2.05	
190	Rehab./Repair of Road from Sajhar to Odhana, Tehsil Jhang L=1.00 Km	Jhang	2.63	2.63	
191	Rehab./Repair of Road from Salyana to Burana, Tehsil Jhang	Jhang	8.41	8.41	

				Procurement Status	
Sr.	Part and Name	District	Total	Comp-	In
NO.	L=3.00 Km	Name	Damage	leted	Process
192	Rehab./Repair of Road from Garriage to Lotay Wali Pull Bhamb road, Tehsil Jhang L=14.80 Km	Jhang	31.24	31.24	
193	Rehab./Repair of Road from Garriage road Jhoke Daya to Sargana, Tehsil Jhang L=5.00 Km	Jhang	12.15	12.15	
194	Rehab./Repair of Road from Haiden Bindi Haiden Mazari Kiran Lau, Tehsil Jhang L=6.50 Km	Jhang	15.05	15.05	
195	Rehab./Repair of Road from Sabbar Kalera Thati Nusrat Salmana, Tehsil Jhang, L= 7.00 km	Jhang	16.72	16.72	
196	Rehab./Repair of Road from Masson to Chak Darzi, Tehsil Jhang, L= 3.50 km	Jhang	18.57	18.57	
197	Rehab./Repair of Road from Jetha More to Bula Patoana, Tehsil Jhang, L= 8.00 km	Jhang	19.31	19.31	
198	Rehab./Repair of Road from Jetha More to Jug Roshan, Tehsil Jhang, L= 3.50 km	Jhang	13.98	13.98	
199	Rehab./Repair of Road from Bhathi More to Salyana & Talwara, Tehsil Jhang, L= 5.55 km	Jhang	23.38	23.38	
200	Rehab./Repair of Road from Kabli to Thati Buslani to Rajana, Tehsil Jhang, L= 4.00 km	Jhang	11.30	11.30	
201	Rehab./Repair of Road from Haveli Sheikh Raju to Qabli Chowk, Tehsil Jhang, L= 5.80 km	Jhang	8.89	8.89	
202	Rehab./Repair of Road from Thati Qureshian Vanpal to Chatta Bakhsha, Tehsil Jhang, L= 5.50 km	Jhang	10.23	10.23	
203	Rehab./Repair of Road from Adda Wasu to Old Layyah Road (Ali Chowk), Tehsil 18-Hazari L=1.65 Km	Jhang	5.73	5.73	
204	Rehab./Repair of Road from Adda Kot Shakir to Abadi Joya, Tehsil 18-Hazari, L= 2.50 km	Jhang	6.18	6.18	
205	Rehab./Repair of Road from Rasheed Pur to Binda Rasheed Pur, Tehsil 18-Hazari, L= 0.92 km	Jhang	3.81	3.81	
206	Rehab./Repair of Road from Astana to Biller, Tehsil 18-Hazari, L= 0.33 km	Jhang	1.09	1.09	
207	Rehab./Repair of Road from Rasheed Pur to Head Trimu via Abadi Sillahwali, Tehsil 18-Hazari, L= 1.40 km	Jhang	3.14	3.14	
208	Rehab./Repair of Road from Katcha Ahmad Pur road to Purani Abadi Dhan Miani to Jabouana, Tehsil 18-Hazari, L= 4.20 km	Jhang	10.84	10.84	
209	Rehab./Repair of Road from Flood Bund to Kamra, Tehsil 18- Hazari, L= 0.44 km	Jhang	11.74	11.74	
210	Rehab./Repair of Road from Zaffar chowk to Wasawa, Tehsil 18- Hazari, L= 2 km	Jhang	6.23	6.23	
211	Rehab./Repair of Road from Dargahi Shah near Rang Pur Canal to Wasawa, Tehsil 18-Hazari, L=5km	Jhang	10.37	10.37	
212	Rehab./Repair of Road from Old Khushab road to Darbar Ghazi Abad, Tehsil 18-Hazari, L= 0.48 km	Jhang	1.32	1.32	
213	Rehab./Repair of Link Road Munday Syed, Tehsil 18-Hazari, L=0.60 Km	Jhang	1.63	1.63	
214	Rehab./Repair of Road from Jabouana to Rahseed Pur, Tehsil 18-Hazari, L= 4.90 km	Jhang	8.93	8.93	
215	Rehab./Repair of Road from Jabouana to Head Trimmu, Tehsil 18-Hazari, L= 2.50 km	Jhang	4.27	4.27	
216	Rehab./Repair of Road from Abadi Mukhtar Khan Jabouana to Kanda Rasheed pur, Tehsil 18-Hazari, L= 0.68 km	Jhang	1.98	1.98	
217	Rehab./Repair of Road from Adda Wasu to Khizar Wala, Tehsil 18-Hazari, L= 3 km	Jhang	10.09	10.09	
218	Rehab./Repair of Road from Rodu Sultan to UCH Gul Imam, Tehsil 18-Hazari, L= 11.32	Jhang	20.92	20.92	
219	Rehab./Repair of Road from 18-Hazari Thana More to Darbar 18- Hazari, Tehsil 18-Hazari, L= 0.60 km	Jhang	1.71	1.71	
220	Rehab./Repair of Road from Adda Kot Shakir To Abadi Kot Shakir, Tehsil 18-Hazari, L= 2.00 km	Jhang	2.81	2.81	
221	Rehab./Repair of Road from New Khushab road to Old Khushab road via Iqbal Nagar, Tehsil 18-Hazari, L= 1.00 km	Jhang	1.94	1.94	

				Procurement Status	
Sr. No.	Package Name	District Name	Total Damage	Comp- leted	In Process
222	Rehab./Repair of Road from Bhakkar Road to Astana Kotla, Tehsil 18-Hazari, L= 1.18 km	Jhang	3.22	3.22	
223	Rehab./Repair of Road from Muzaffar Garh road to Farooq Wala, Tehsil 18-Hazari, L= 1.50 km	Jhang	4.89	4.89	
224	Rehab./Repair of Road from Katcha Ahmad pur road from katcha Packa More Abadi Rahseed pur Tibba Gali, Tehisl 18-Hazari, Length:11.36 KM	Jhang	17.47	17.47	
225	Ahmad Pur Sial Fateh Pur to Sadhana Morr Bye Pass, Tehsil 18- Hazari, L:1.00 Km	Jhang	1.61	1.61	
226	Rehab./Repair of Road from Ballu Shahbal to Binda Baig Mahni Length:2.90 KM	Jhang	8.69	8.69	
227	Rehab./Repair of Road from Sargodha Road to Mouza Pattuana upto Phant, Length:2.10 KM	Jhang	6.55	6.55	
228	Rehab./Repair of Road from Thatta Mahla Railway Crossing to Abadi Balochan, Length:1.31 KM	Jhang	4.27	4.27	
229	Rehab./Repair of Road from Abadi Ghulam Akbar Mohl to Dera Mian Zafar Abbass Mohl via Halki Phant, Length:2.35 KM	Jhang	5.01	5.01	
230	Rehab./Repair of Road from Jabouana to Darghi Shah, Length:1.75 KM	Jhang	3.83	3.83	
231	Rehab./Repair of Road from Rodu Sultan to Tibba Gali, Length:1.30 KM	Jhang	5.38	5.38	
232	Rehab./Repair of Road from Old Layyah Road to Ali Chowk to Jamali Khord, Length:2.50 KM	Jhang	3.36	3.36	
233	Rehab./Repair of Road from Saddar Pull to Kharanwala Length:2.20 KM	Jhang	6.12	6.12	
234	Rehab./Repair of Road from Badh Rajbana to Khan Pur , Length:0.50 KM	Jhang	1.52	1.52	
235	Rehab./Repair of Road from Adda Kot Umardraz to Mahram Sial via Kot Umardraz, Bela Phulai, Bela Surbana, Length:10.80 KM	Jhang	31.73	31.73	
236	Rehab./Repair of Road from Adda Gulgasht to Bela Phulai , Length:1.40 KM	Jhang	2.96	2.96	
237	Rehab./Repair of Road from Khaki Lakhi Pull to Kharanwala, Length:2.25 KM	Jhang	2.32	2.32	
238	Rehab./Repair of Road from Shorkot to Dabkalan road Length:1.70 KM	Jhang	2.46	2.46	
239	Rehab./Repair of Road from Shah Khalel to Shakar Pur, Length:0.12 KM	Jhang	1.19	1.19	
240	Rehab./Repair of Road from Shah Khalel to Drbar Makhan Shah, Length:0.50 KM	Jhang	3.50	3.50	
241	Rehab./Repair of Road from Old Jhang Massan Road, Length:3.20 KM	Jhang	10.54	10.54	
242	Rehab./Repair of Road from Chak Noon to Lumda Bund, Length:4.70 KM	Jhang	8.35	8.35	
243	Rehab./Repair of Road from 18-Hazari to Umrana Flood Bund, Length:3.00 KM	Jhang	5.83	5.83	
244	Rehab./Repair of Road from Jhang Sargodha Road to Mouza Kul Kurrai, Length:3.55 KM	Jhang	23.18	23.18	
245	Rehab./Repair of Road from Ghugay wali Basti to Mouza Kul Karai Length:3.60KM	Jhang	11.15	11.15	
246	Rehab./Repair of Road from Rasheed pur to Batian wali Pull , Length:1.13 KM	Jhang	2.38	2.38	
247	Rehab./Repair of Road from Kot khera to Darbar Via Mohal Length:0.92 KM	Jhang	1.13	1.13	
248	Rehab./Repair of Katcha Multan Road (Old By Pass to New Bye Pass), Length:3.60 KM	Jhang	7.91	7.91	
249	Rehab./Repair of Road from Bhakkar Road to Bangsi Sial, Length:1.60 KM	Jhang	1.88	1.88	
250	Rehab./Repair of Road from Jhang Sargodha Road to Old Massan Road, Length:6.70 Km	Jhang	10.32	10.32	
251	Rehab./Repair of Road from Jhang Sargodha Road to Bili Habib, Length:0.90 Km	Jhang	2.51	2.51	

				Procurement Status	
Sr. No.	Package Name	District Name	Total Damage	Comp- leted	In Process
252	Rehab./Repair of Road from Sargodha road Hospital Pakkey Wala to Kot Murad, L:2.10 Km	Jhang	5.69	5.69	
253	Rehab./Repair of Road from Kurrianwala to Abadi Ramana Wala, L:1.90 Km	Jhang	2.87	2.87	
254	Rehab./Repair of Road from Khewa to Kharora Baqir, L:2.40 KM	Jhang	5.41	5.41	
255	Rehab./Repair of Road from Khewa to Budhayki Sandhhila, L:4.60 Km	Jhang	9.74	9.74	
256	Rehab./Repair of Road from Sultan Pur to Thatta Ramana, L:4.00 Km	Jhang	8.40	8.40	
257	Rehab./Repair of Road from Sultan Pur to Thatti Hamayun, L:3.25 Km	Jhang	10.96	10.96	
258	Rehab./Repair of Road from Ahmad Pur Katcha Road Machiwala to Darbar Bhoraywala, L:2.70 KM	Jhang	2.98	2.98	
259	Rehab./Repair of Road from Ahamd Pur Katcha Road Tibba Gahli to Basti Jusa, L:2.00 KM	Jhang	3.44	3.44	
260	Rehab./Repair of Road from Ahmad Pur Katcha Road Meernaywala to Darbar Peer Abdul Razzaq, L:1.00 Km	Jhang	1.75	1.75	
261	Rehab./Repair of Road from Pretti to Islam Pur, L:1.85	Jhang	3.40	3.40	
262	Rehab./Repair of Road from Kot Bahadar to Bahar, L:0.90 Km	Jhang	1.62	1.62	
263	Rehab./Repair of Road from Garh More to Link Road Darbar Sultan Bahoo, L:3.00 Km	Jhang	3.58	3.58	
264	Rehab./Repair of Road from Mason to Chella, Tehsil Jhang L=5.50 Km	Jhang	13.02	13.02	
265	Rehab./Repair of Road from Chund to Masson Via Jherki, Tehsil Jhang, L= 12.60 km	Jhang	47.48	47.48	
266	Rehab./Repair of Road from Kot Essa Shah to Akrian Wala, Tehsil Jhang, L= 5.00 km	Jhang	17.27	17.27	
267	Rehab./Repair of Road from Chund Massan to Pirkot Sadhana road, Tehsil Jhang, L= 3.60 km	Jhang	32.24	32.24	
268	Rehab./Repair of Road from Lalian Raod to Mongar Sher Garh Baliyan, Tehsil Jhang, L= 4.50 km	Jhang	15.54	15.54	
269	Rehab./Repair of Road from Khan Da Kot to Hussain Abad, Tehsil Jhang, L= 2.31 km	Jhang	16.20	16.20	
270	Rehab./Repair of Road from Pabbar Wala Khan Da Kot Kilcha, Tehsil Jhang, L= 10.50 km	Jhang	31.05	31.05	
271	Rehab./Repair of Road from Link To Kot Shakir Rest House, Tehsil 18-Hazari, L= 1.68 Km	Jhang	4.49	4.49	
272	Rehab./Repair of Road from Head Trimmu to Rasheed pur via Binda Rahseed Pur, Tehsil 18-Hazari, L= 4.60 km	Jhang	17.21	17.21	
273	Rehab./Repair of Road from Katcha Ahmad pur road to Lashari Pull via Pahar Pur and Tarror, Tehsil 18-Hazari, L= 5.00 km	Jhang	6.42	6.42	
274	Old Khushab Road from Muhammad Wala to Alyana, Tehsil 18- Hazari, L=7.45 KM	Jhang	31.87	31.87	
275	Rehab./Repair of Road from Old Khushab Road to Pattan Kot Shahkir, Tehsil 18-Hazari, L= 0.55 km	Jhang	1.54	1.54	
276	Rehab./Repair of Road from Flood Bund to Dossa via Munday Syed, Tehsil 18-Hazari, L= 0.45 km	Jhang	1.74	1.74	
277	Rehab./Repair of Road from Munday Syed to Sabouana Garbi, Tehsil 18-Hazari, L= 0.89 km	Jhang	1.23	1.23	
278	Rehab./Repair of Road from Koera Wala to Darbar Shaheedaan Wala, Tehsil 18-Hazari, L= 1.10 km	Jhang	3.04	3.04	
279	Rehab./Repair of Road from Old Khushab Road to Imam kot, Tehsil 18-Hazari, L= 0.70 km	Jhang	1.10	1.10	
280	Rehab./Repair of Road from Abadi Furazi to Dara Wasawa, Tehsil 18-Hazari,L= 2.25 km	Jhang	5.81	5.81	
281	Rehab./Repair of Road from Wasawa to Sultan Lashari, Tehsil 18-Hazari, L= 1.50	Jhang	2.26	2.26	
282	Rehab./Repair of Road from Dargahi Shah to Sultan Lashari, Tehsil 18-Hazari, L= 2.50	Jhang	7.04	7.04	
283	Rehab./Repair of Road from Sultan Lashari to Abadi Lashari, Tehsil 18-Hazari, L= 3	Jhang	9.51	9.51	
				Procurem	ent Status
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Sr. No.	Package Name	District Name	Total Damage	Comp- leted	In Process
284	Rehab./Repair of Road from Lashari Pull to Abadi Lashari, Tehsil 18-Hazari, L= 0.95	Jhang	2.43	2.43	
285	Rehab./Repair of Road from Rang Pur Canal to Jamali Kalan, Tehsil 18-Hazari, L= 3.70	Jhang	4.03	4.03	
286	Rehab./Repair of Road from jamali Kalan to Pandi Wala, Tehsil 18-Hazari, L= 2.50 km	Jhang	4.60	4.60	
287	Rehab./Repair of Road from Dall Mor to Qasir wala i/c Darbar Sheikh Sasduddin, Tehsil 18-Hazari, L= 2.22 km	Jhang	6.65	6.65	
288	Rehab./Repair of Road from Abadi Kot arraian to Abadi Akri Wala, Mouza Rashid Pur, Tehsil 18-Hazari, L= 0.81 Km	Jhang	1.64	1.64	
289	Rehab./Repair of Road from Ahmad Pur Katcha road to Abbadi Mehmood Shah, Tehsil AP Sial L=0.80 Km	Jhang	1.15	1.15	
290	Rehab./Repair of Road from Ahmad Pur Katcha road Mian Jalal to Abbadi Inayat shah, Tehsil AP Sial L=0.90 Km	Jhang	2.47	2.47	
291	Rehab./Repair of Road from Ahmadpur Katcha road, Tehsil AP Sial L=6.40 Km	Jhang	15.80	15.80	
292	Rehab./Repair of Road from Darbar Hazrat Sultan Bahoo to Basti Sabani, Tehsil AP Sial L=2.70 Km	Jhang	6.54	6.54	
293	Rehab./Repair of Road from Darbar Hazrat Sultan Bahoo to Basti Deraj , Tehsil AP Sial L=0.70 Km	Jhang	2.26	2.26	
294	Rehab./Repair of Road from Hasso Balail to Pull Machi wala, Tehsil AP Sial L=3.30 Km	Jhang	5.26	5.26	
295	Rehab./Repair of Road from Kot Bahadar to Pull Gagan, Tehsil AP Sial L=6.50 Km	Jhang	16.26	16.26	
296	Rehab./Repair of Road from Adda Degree to Abadi Dagree, Tehsil AP Sial L=1.80 Km	Jhang	3.20	3.20	
297	Rehab./Repair of Road from Pull Bahar to Abadi Malik Haq Nawaz Jafri, Tehsil AP Sial L=1.00 Km	Jhang	1.92	1.92	
298	Rehab./Repair of Road from G.M. Raja to Bye-Pass Sultan Bahoo, Tehsil AP Sial L=2.50 Km	Jhang	2.71	2.71	
299	Rehab./Repair of Road from Rodu Sultan to Kashmir Colony, Tehsil AP Sial, L= 2.70 km	Jhang	5.25	5.25	
300	Rehabilitation / Restoration of Road from Tapiala to Essa Road (L=10.00 KM) Tehsil Narowal.	Narowal	28.21	28.21	
301	Rehabilitation / Restoration of Road from Qila Ahmed Abad to Dhamthal Road (L=7.00 to 15.50 KM Part-II) Tehsil Narowal.	Narowal	15.72	15.72	
302	Rehabilitation / Restoration of Road from Tapiala to Qila Ahmed Abad (L=2.62 KM) Tehsil Narowal.	Narowal	7.15	7.15	
303	Rehabilitation / Restoration of Road from Oranga Abad to Nangle Nadeer Tehsil Narowal.	Narowal	3.21	3.21	
304	Rehabilitation / Restoration of Road from Birdi Shah to Kula Mandiala Road Tehsil Narowal.	Narowal	2.99	2.99	
305	Rehabilitation / Restoration of Road from Fattoki to Baryyar (L=8.30 KM) Tehsil Narowal.	Narowal	10.19	10.19	
306	Rehabilitation / Restoration of Road from Budha Dhola Rayya Road (L=12.40 KM) Tehsil Narowal.	Narowal	1.20	1.20	
307	Rehabilitation / Restoration of Road from Malook Pur to Khara Mega (L=2.96 KM) Tehsil Narowal.	Narowal	6.83	6.83	
308	Rehabilitation / Restoration of Road from Gangor to Rehman Pur (L=3.00 KM) Tehsil Narowal.	Narowal	13.33	13.33	
309	Rehabilitation / Restoration of Road from Ali Pur Syedan to Budha Dhola Road (Rasheed Pur Chok) (L=18.00 KM) Tehsil Narowal.	Narowal	5.65	5.65	
310	Rehabilitation / Restoration of Road from Dhoda to Giddian Road (L=18.00 KM) Tehsil Narowal.	Narowal	2.68	2.68	
311	Rehabilitation / Restoration of Road from Jassar Point to Fasih Pur(L=3.00KM) Tehsil Narowal.	Narowal	1.39	1.39	
312	Rehabilitation / Restoration of Road from Hallowal to Gullah Maharan (L=5.00 KM) Tehsil Narowal.	Narowal	3.95	3.95	
313	Rehabilitation / Restoration of Road from Ahlulal to Rasheed Pur (L=5.00 KM) Tehsil Narowal.	Narowal	4.06	4.06	

				Procurem	ent Status
Sr. No.	Package Name	District Name	Total Damage	Comp- leted	In Process
314	Rehabilitation / Restoration of Road from Behlowali to Kani Jafar Abad (L=2.62 KM) Tehsil Narowal.	Narowal	2.53	2.53	
315	Rehabilitation / Restoration of Road from Hallowal to Baryyar (L=5.30 KM) Tehsil Narowal.	Narowal	7.86	7.86	
316	Rehabilitation / Restoration of Road from Baddomallhi to Bathanwala (L=3.83KM) Tehsil Narowal.	Narowal	4.53	4.53	
317	Rehabilitation / Restoration of Road from Tanda More Darman to Kot Naju (L=2.25 KM) Tehsil Zafarwal.	Narowal	2.50	2.50	
318	Rehabilitation / Restoration of Road from Kot Naju to Chak Vichala (L=1.00 KM) Tehsil Zafarwal.	Narowal	2.00	2.00	
319	Rehabilitation / Restoration bridge approach from Zafarwal to Darman Road in KM 09.00 Tehsil Zafarwal.	Narowal	3.16	3.16	
320	Rehabilitation / Restoration of Road from Bubak, Mehmood Pur to Raju Marl (L=4.50 KM) Tehsil Zafarwal.	Narowal	4.47	4.47	
321	Rehabilitation / Restoration of Road from BCZ Road to Chah Syedan to Uncha Kalan (L=1.25 KM) Tehsil Zafarwal.	Narowal	4.96	4.96	
322	Rehabilitation / Restoration of Road from Noor Kot Chowk to Chack Baha-ud-Din Tehsil Shakargarh.	Narowal	1.82	1.82	
323	Rehabilitation / Restoration of Road from Bajna to Nathu Kot Tehsil Shakargarh.	Narowal	2.98	2.98	
324	Rehabilitation / Restoration of Road from Bustan to Mandiali (L=3.00 KM) Tehsil Shakargarh.	Narowal	9.84	9.84	
325	Rehabilitation / Restoration of Road from Mandiali to Maddo Goal (L=2.20 KM) Tehsil Shakargarh.	Narowal	7.41	7.41	
326	Rehabilitation / Restoration of Road from Mundi Khail to Maddo Goal (I =6 00 KM) Tehsil Shakargarh	Narowal	7.36	7.36	
327	Rehabilitation / Restoration of Road from Lengah to Mandiali (I =1 00 KM) Tehsil Shakargarh	Narowal	4.25	4.25	
328	Rehabilitation / Restoration of Road from Baramanga to Dhala Bura (L=3.00 KM) (Const. Of 3 No. Span @ 10' each battery of culvert) Tehsil Shakargarh.	Narowal	2.51	2.51	
329	Rehabilitation / Restoration of Road from Malik Bagh to Kanjroor (L=6.00 KM) Tehsil Shakargarh.	Narowal	4.93	4.93	
330	Rehabilitation / Restoration of Road from Bustan to Kot Bachana (L=1.00 KM) Tehsil Shakargarh.	Narowal	2.06	2.06	
331	Rehabilitation / Restoration of Road from Manzoor Pur Plaat to Village Gangran (L=2.00 KM) Tehsil Shakargarh.	Narowal	1.88	1.88	
332	Rehabilitation / Restoration of Mall Godown Road from Kutchery Road to Eid Gah Chowk Tehsil Narowal.	Narowal	1.18	1.18	
333	Rehabilitation / Restoration of Eid Gah Road from Eid Gah Chowk to Rasool Pura Chowk Tehsil Narowal.	Narowal	1.26	1.26	
334	Rehabilitation / Restoration of Gunj Hussain Abad Road from Mall Godown to Cricket Ground Tehsil Narowal.	Narowal	1.87	1.87	
335	Rehabilitation / Restoration of Zafarwal Bazar Road from Insari Bakri Chowk to Zafarwal Chowk Tehsil Narowal.	Narowal	1.47	1.47	
336	Rehabilitation / Restoration of Hajver Nagar Road from SP House to Talah Chowk Tehsil Narowal.	Narowal	1.82	1.82	
337	Rehabilitation / Restoration of Old DCO Office road from Boys Degree College Road to Abadi Essa Nagri Tebsil Narowal	Narowal	2.00	2.00	
338	Rehabilitation / Restoration of Allama Iqbal Road from Eid Gah Road to Zafarwal Chowk	Narowal	1.60	1.60	
339	Rehabilitation / Restoration of Mahianwala Road from Circular Road to Guni Hussain Abad Road Tebsil Narowal	Narowal	10.59	10.59	
340	Const. Of RCC Road & Nullah Darman Road Shakargarh Tehsil Shakargarh	Narowal	10.58	10.58	
341	Const. Of RCC Road & Nullah Chammal Road Shakargarh Tehsil Shakargarh	Narowal	18.16	18.16	
342	Const. Of RCC Road & Nullah Din Pur Chowk to Bye Pass	Narowal	9.22	9.22	
343	Const. Of PCC/Drain & Nullah in Village Terah Gujran Shakargarh Tehsil Shakargarh.	Narowal	5.96	5.96	

				Procurem	ent Status
Sr. No.	Package Name	District Name	Total Damage	Comp- leted	In Process
344	Construction of Retaining wall and PCC Road on Chakri Dhudhamber Road. Rawalpindi	Rawalpindi	15.65	15.65	
345	Rehabilitation of Road from Chountra to Bhal Road Rawalpindi	Rawalpindi	7.24	7.24	
346	Flood Damged Road for Sarwar Shaheed College to Mandra Road Tehsil Gujar Khan	Rawalpindi	2.23	2.23	
347	Rehabilitation of Road Makhi Choha Band Link Road UC Lehri Tehsil Kahuta	Rawalpindi	1.39	1.39	
348	Rehabilitation of Soil Saweri Road UC Khalool Teshil Kahuta	Rawalpindi	1.93	1.93	
349	Rehabilitation of Road/ Soiling Track Bakhtian Galla to Samman UC Narar Tehsil Kahuta	Rawalpindi	1.15	1.15	
350	ESTIMATE FOR RESTORATION OF FLOOD DAMAGES OF MAKHI CHOHA BAND LINK ROAD U.C LEHRI TEHSIL KAHUTA DISTRICT RAWALPINDI	RAWALPIN DI	1.62	1.62	
351	Flood Damage of Bhadana Bhagpur Road (Construction of Battery of Culvert and Approaches 9 Span) UC Bhadana Tehsil Gujar Khan.	Rawalpindi	12.49	12.49	
352	Rehabilitation of Raod from Gorakpur to Chaper Anpur, Rawalpindi	Rawalpindi	34.47	34.47	
353	Construction of Bridge at Chak Jalal Din on Dhoke Syedan Thallian Road Km 2, Tehsil Rawalpindi	Rawalpindi	23.84	23.84	
354	Construction of Culvert 2 Span 16' each on Road from Kalowal to Sihal via Jhandu Syedan at Km 1, Rawalpindi	Rawalpindi	8.40	8.40	
355	Re-Construction of 5 Span Culvert 8' each Span in Km 6 of Sihal to Dhahala Road Via Sangral near Jhando Syedan Village in Tehsil Rawalpindi	Rawalpindi	7.09	7.09	
356	Repair of Vented Causeway KM 1 Choha Khalsa to Bewal via Takkal Road Tehsil Kallar Syedan	Rawalpindi	1.97	1.97	
357	Construction of Vented Causeway on Kallar Syedan to Paikan Road Tehsil Syedan	Rawalpindi	7.22	7.22	
358	Repair of Plan Causeway KM 1 Kalia Barsala Road Tehsil Kahuta	Rawalpindi	1.81	1.81	
359	Repair of Vented Causeway on Bhon Sadiot Road Tehsil Kahuta	Rawalpindi	1.40	1.40	
360	Reconstruction of 12 Span Culverts and retaining Walls in KM 4 to 12 of Dawood Shah Haqani to Jandra Road, Tehsil Kallar Syedan	Rawalpindi	11.01	11.01	
361	Flood Damaged Road for Habib Chowk to Changa Mera Road Tehsil Gujar Khan	Rawalpindi	9.64	9.64	
362	Flood/ Rain Damaged Link Road Kour Naseeb U.C. Changa Bangial Length 5.0 KM Tehsil Gujar Khan	Rawalpindi	15.80	15.80	
363	Rain Damaged Road for Mirza Kamili Link Road Tehsil Gujar Khan	Rawalpindi	3.46	3.46	
364	Flood Damaged Road for Mohra Kumkaran Link Road Tehsil Gujar Khan	Rawalpindi	1.32	1.32	
365	Flood Damaged Road for Link Alaff Road Length 0.80 Km Tehsil Gujar Khan	Rawalpindi	2.40	2.40	
366	Restoration of Rain Damaged Road of Khalool Janattal Sweri Road U.C. Khalool Tehsil Kahuta	Rawalpindi	2.92	2.92	
367	Restoration of Rain Damaged Link Road Surr U.C. Beor Tehsil Kahuta	Rawalpindi	1.35	1.35	
368	Restoration of Rain Damaged Road of Gorah Rajgan Road U.C. Beor Tehsil Kahuta	Rawalpindi	6.30	6.30	
369	Restoration of Rain Damaged Link Road Keral U.C. Punjar Tehsil Kahuta	Rawalpindi	7.90	7.90	
370	Restoration of Rain Damaged Road of Bhoon Loona Road U.C. Dakhali Tehsil Kahuta	Rawalpindi	2.02	2.02	
371	Restoration of Rain Damaged Link Road Salitha U.C. Punjar Tehsil Kahuta	Rawalpindi	3.71	3.71	
372	Restoration of Rain Damaged Link Road of Sour U.C. Punjar Tehsil Kahuta	Rawalpindi	4.70	4.70	
373	Restoration of Rain Damaged Road of Punjar Jabbrian Narar Road U.C. Narar Tehsil Kahuta	Rawalpindi	3.62	3.62	

				Procureme	ent Status
Sr. No.	Package Name	District Name	Total Damage	Comp- leted	In Process
374	Restoration of Rain Damage Estimate of Punjar Kultia Road U.C. Punjar Tehsil Kahuta	Rawalpindi	15.97	15.97	
375	Restoration of Rain Damaged Link Road Soon to Barri U.C. Narar Tehsil Kahuta	Rawalpindi	8.37	8.37	
376	Restoration of Rain Damaged Link Road from Nara to Bagoon upto Jandi Hanaser U.C. Narar Tehsil Kahuta	Rawalpindi	2.44	2.44	
377	Rehabilitation of Malala Bridge on Jand Najar Road in Tehsil Gujar Khan	Rawalpindi	4.57	4.57	
378	Rehabilitation/ improvement of link road Mial Tehsil Rawalpindi length = 0.70 km	Rawalpindi	2.83	2.83	
379	Rehabilitation of Rawalpindi Chakri road at KM 38, Rawalpindi	Rawalpindi	9.69	9.69	
380	Sialkot Gondal Road	Sialkot	12.35	12.35	
381	Choor Chak to Gondal Road	Sialkot	8.37		8.37
382	Seer to Sadarpura Road	Sialkot	22.98	22.98	
383	Khojay Chak to Looni Road	Sialkot	23.37	23.37	
384	Mudassar Shaheed Road	Sialkot	26.74	26.74	
385	Kharota Syedan Road	Sialkot	8.52	8.52	
386	Wazirabad Sialkot Kashmir Road (Dallowali Phatic to Sajeetgarh)	Sialkot	17.89	17.89	
387	Chaprar road to Salehpur	Sialkot	11.44		11.44
388	Said pur road to village Dallowali Via Karool Dade Chai	Sialkot	11.28	11.28	
389	Dallowali to Thathi Minderwal Road	Sialkot	14.55	14.55	
390	Kamanwala to Gamu Garh Road	Sialkot	4.43	4.43	
391	Sialkot Marala road (Machhi Khokhar) to Balanwala	Sialkot	1.55	1.55	
392	River Tavi to Phukalian	Sialkot	28.88	28.88	
393	Sialkot Bhagowal Philoura Road	Sialkot	7.44	7.44	
394	Rarri Pull to Svedanwali via Alo Chak Road	Sialkot	14.15	14.15	
395	Azam Block Bridge over Nullah Bhed	Sialkot	7.01	7.01	
396	Dogran Kalan to Jhatta Kala Road	Sialkot	7 42	7 42	
397	Lalpur Badian Sanduwala Road	Sialkot	4 07	4 07	
398	Kot Harar to Khana Road	Sialkot	4 56	4 56	
	Khajooriwal To Kapoorwali (Sialkot Marala Road To Village	olditot			
399	Sanduwala), Kapoorwali, Jourian, Basantpur, Ajjowali, Malo Chak, Zaboor Ellabi Degree College & Ibatta	Sialkot	27.57	27.57	
400	Sherpur to Rang	Sialkot	23.58	23.58	
401	Lalpur to Chak Adil	Sialkot	2.32	2.32	
402	Haripur to Kala Harawan Road	Sialkot	7 47	7 47	
403	Bismallah Chowk to Sattowali (Chowni Sulehrian)	Sialkot	13 59	13 59	
404	Ghuinke to Verio road	Sialkot	4 09	4 09	
405	Sialkot Pasrur road to Ghunna Khurd Road	Sialkot	4 37	4.37	
406	Ura Bund Dallowali Road to Bhattay Kalan Road (Restoration of existing Culvert)	Sialkot	4.61	4.61	
407	Adda Randheer to Village Bhagrian Road	Sialkot	10.62	10.62	
408	Jathekay Khatiala Road	Sialkot	7.31	7.31	
409	Kot Dina to Habibpur Road	Sialkot	4.82	4.82	
410	Randheer to Kharl via Maddokay Road	Sialkot	11 27	11 27	
411	Adda Randheer to Village Dhodowal	Sialkot	11 11	11 11	
412	Randheer to Pir Kot Road	Sialkot	7 70	7 70	
413	Channi Gondal to Piranwala road	Sialkot	32.52	32.52	
414	Habibpur to Pannu Attari road	Sialkot	2 92	2 92	
415	Bhakaraywali to Chak Ikhtiyar road	Sialkot	12 18	12 18	
416	Haider Pura Jheithkay to Sarankay Road	Sialkot	2 11	2.10	
417	Village Dour to RB Village	Sialkot	3 36	3 36	
418	Changoi Pull to Qila Kalarwala Road	Sialkot	<u> </u>	<u> </u>	
410	Changgi Full to Mirakour Road	Sialkot	21.7	2 AA	
420	Guiranwala Pasrur road (Mokhal Dully) to Nawannind Poed	Sialkot	26.57	26 57	
120	Chagarwali To Koreki	Sialkot	20.07	20.07	
121 122	Patta Baiwa to Koreke	Sialkot	21.03	2.03	
102	Chianwai to Eagearanwali Dadali Dood	Sialkot	7.00	7.06	
120	Dheerke to Sian Malowali Hacher	Sialkot	1.30 Q 07	1.30 Q 07	
124	Socki to Duniarain Road	Sialkot	26.40	26.40	
720		Jakot	20. <del>4</del> 3	20.49	

				Procurem	ent Status
Sr.	Package Name	District	Total Damage	Comp-	In Process
426	Fazalabad to Kharolian Road	Sialkot	6.36	6.36	1100633
427	Ghuinke to Kharolian Road	Sialkot	7.09	7.09	
428	Jamkay Cheema Baddoke Cheema Road	Sialkot	10.29	10.29	
429	Ghuinke to Kotli Murrlan Road	Sialkot	7.37	7.37	
430	Adda Aadha to Hapogarha	Sialkot	11.87	11.87	
431	Bhelomahar to Nawaz Sharif Road	Sialkot	12.89	12.89	
432	Link road from Targa to BHS Bogray via Budhupur	Sialkot	10.54	10.54	
433	T.B. Hospital to Raja Ghuman Road	Sialkot	16.35	16.35	
434	Chowk Civil Hospital Daska to Bambanwala	Sialkot	16.30	16.30	
435	Bhadawala to Choura via Nokhrian	Sialkot	10.62	10.62	
436	Bhadaywala to Chak Arjani road i/c link to Mayoan Da Dera	Sialkot	1.29	1.29	
437	Goindke to Nokhrian road	Sialkot	11.64	11.64	
438	Junction Brbd Link Canal Gujranwala Sialkot Road Daska Pasrur Road To Baroke Daska Byepass	Sialkot	12.03	12.03	
439	Head Bambanwala to Mitranwali	Sialkot	16.20	16.20	
440	Kingra to Chak Sanga	Sialkot	1.43	1.43	
441	Masyal to Paril Road	Sialkot	1.01	1.01	
442	Pindi Minhasan to Khalilpur road	Sialkot	4.14	4.14	
443	Kingra to Townkanwali (Baghiari)	Sialkot	4.86	4.86	
444	Dogranwali to Kot Dhanan road	Sialkot	9.19	9.19	
445	Philoura to Throw Mandi Road	Sialkot	12.22	12.22	
446	Throw Mandi To Kingra via Khanpur Syedan Road	Sialkot	9.11	9.11	
447	Chawinda to Wajeedwali Road	Sialkot	2.94	2.94	
448	Panwana to Sirah Fateh Road	Sialkot	1.00	1.00	
449	Choubara to Mandiala Qadarabad road	Sialkot	2.71	2.71	
450	Chawinda to Kamalpur Bajwa road	Sialkot	6.17	6.17	
451	Mattakay Qadian To Kamalpur Bajwa road	Sialkot	9.59	9.59	
452	Kalasswala to Mahar Road	Sialkot	4.03	4.03	
453	Village Arrian to Kotli Syedan	Sialkot	2.93	2.93	
454	Khoi Stop totakhatpur via Poola Wahga Road	Sialkot	13.52	13.52	
455	Takahtpur to Qila Ahmedabad Road i/c Bhond	Sialkot	5.46	5.46	
456	Pasrur to Kalaswala Road	Sialkot	9.81	9.81	
457	Khoi Stop, Mian Harpal to Punjgrain Road	Sialkot	10.67	10.67	
458	Qila Kalarwala to Kot Agha Road	Sialkot	11.29	11.29	
459	Miro Bhadyar to Noorpur Syphon Road	Sialkot	5.21	5.21	
460	Kallowall to Uccha Pharang Via Rupowall Road	Slaikot	14.77	14.77	
461	Dhoda to Shah Hussain Road	Sialkot	3.64	3.64	
462	Dharlwal to Uchna Pharang Road	Slaikot	3.86	3.86	
463	Pasrur Dhoda Road	Slaikot	2.83	2.83	
404	Qila Kalarwala to Baddonnali Road	Sialkot	1.13	1.13	
400	Apploaches of Naka Pull Brodel Bood Dooks	Sialkot	4.20	4.20	7.04
400	Construction/ Repair of Sambrial Road Daska	Sialkot	7.04		7.04
407	Construction/ Repair of Merai Chowk to College Road Daska	Sidikul	20.09		20.09
468	Dual Carriage Way	Sialkot	11.03		11.03
469	Construction/ Repair of Wazira Abad Road Daska	Sialkot	5.45		5.45
470	Abad, Length 5.00 Km(Affected Length 3.00Km)	Sargodha	6.39	6.39	
471	Rehabilitation of road from Shahpur Bhera road to Ghangwal Bharat, Length 4.60 Km(Affected Length 3.80 Km)	Sargodha	1.98	1.98	
472	Rehabilitation of road from Jhawarian (Pul Nehr Shahpur Branch Canal) to Megha road Length 6.00 Km (Affected Length 5.70 Km)	Sargodha	1.10	1.10	
473	Rehabilitation of road from Shahpur Saddar to Chachar via Bakhar Bar, Length 8.20 Km (Affected L: 1.60 Rft).	Sargodha	1.66	1.66	
474	Rehabilitation of road from Shahpur City to Jalal Pur Jageer, Length 2.50 Km.	Sargodha	1.41	1.41	
475	Rehabilitation of road from Thatti Muzlam road Nizamabad Boys School to Bonga Jhmat, Length 2.00 Km.	Sargodha	1.31	1.31	
476	Rehabilitation of road from Thatti Ubhi to Jhugian Mian Muhammad, Length 2.50 Km.	Sargodha	1.09	1.09	

				Procurem	ent Status
Sr. No.	Package Name	District Name	Total Damage	Comp- leted	In Process
477	Rehabilitation of road from Nehang to Havali Majooka, Length 6.75 Km	Sargodha	2.02	2.02	
478	Rehabilitation of road from J.S.S road Jahanian Shah to Shahpur Kanjoo, Length 5.57 Kms.	Sargodha	1.85	1.85	
479	Rehabilitation of road from Sial More to Lahore road Rehnwala i/c Kot Shabal, Length 3.80 Km	Sargodha	2.50	2.50	
480	Rehabilitation of road from Sial More Interchange to Midh road Darbar Peer Aarhi Shah Murad Wala, Length 2.65 Km	Sargodha	1.05	1.05	
481	Rehabilitation of road from Phalia Ahmad Nagar road to Abadi Nasir Pur Khurd, Length 1.80 Kms.	Sargodha	1.02	1.02	
482	Rehabilitation of road from Chak Saida to Kalas Sharif,Length 3.00 Km	Sargodha	1.79	1.79	
483	Rehabilitation of road from Bhera Malikwal road to Nimtas via Kot Ahmad Khan Length 2.40 Km	Sargodha	2.88	2.88	
484	Rangpur Chowk to Pattan Rangpur Road	Muzafargar h	4.39	4.39	
485	Khushab Muzaffargarh Road Peer Di Bhani Link Road Magsoodpur Road	Muzafargar h	2.64	2.64	
486	Khushab Muzaffargarh Road Adda Sarwar Wali to Dera Gul Muhammad Road	Muzafargar h	2.80	2.80	
487	Rangpur Road to Rakh Kotla Sadat to Bakhshay wala Mouza Pipli Road	Muzafargar h	1.62	1.62	
488	Khushab Muzaffargarh Road to Jiwana Banglow to Primary School Sulhi Road	Muzafargar h	1.11	1.11	
489	Khushab Muzaffargarh Road to Kali Pull Road	Muzafargar h	1.70	1.70	
490	Khushab Muzaffargarh Road to Basti Bhuttian raod	Muzafargar h	1.23	1.23	
491	Khushab Muzaffargarh Road to Khangan Shumali to Darri Matam Road	Muzafargar h	3.78	3.78	
492	Khushab Muzaffargarh Road to Thatha Sialan Road	Muzafargar h	1.49	1.49	
493	Khushab Muzaffargarh Road to Langar Sarai to Basti Pacca Sandila Road	Muzafargar h	1.58	1.58	
494	Khushab Muzaffargarh Road to Basti Peer Manjhan Sultan Road. (2 Span 12' each Bridge i/c Repair of Road).	Muzafargar h	2.86	2.86	
495	Basti Sikhani to Bait Channa Road	Muzafargar h	1.87	1.87	
496	Shahi Wala to Shah Wasava Road	Muzafargar h	4.52	4.52	
497	Khanani to Kotla Ager Bund Road	Muzafargar h	3.65	3.65	
498	Kairpur to Seetpur via Ghiree	Muzafargar h	3.84	3.84	
499	Jiwana Banglow to Basti Jarian wala Peer Kamal Sarbana High School	Muzafargar h	1.15	1.15	
500	Khushab Muzaffargarh Road to Maqsoodpur via Chak No.6	Muzafargar h	5.04	5.04	
501	Head Muradabad to Qasba Road	Muzafargar h	3.82	3.82	
502	Road from Bhoa Hassan Chakorri Road to Thathi Marraran.	M.B Din	7.87	7.87	
503	Road from Bherowal to River Chenab via Basti Mangatan.	M.B Din	1.09	1.09	
504	Road from Chakorri to Noor Pur Katvi.	M.B Din	2.30	2.30	
505	Road from Ado Sarwani to Sheikh Alipur.	M.B Din	4.40	4.40	
506	Road from Bhoa Hassan to Farukh Pur Nau via Matto Malu Nau i/c link road Bhikhewal.	M.B Din	11.27	11.27	
507	Road from Adda Nawan Lok to Bhoa Hassan Farukhpur via Nawan Lok & Dera Arrian.	M.B Din	1.50	1.50	
508	Road from Chak Saida to Charranwala.	M.B Din	2.49	2.49	
509	Road from Phalia to Duggal via Pilot School.	M.B Din	3.20	3.20	ļ
510	Road from Hellan Bridge Rasul Pur to Makhnawali via Kotli Qazi.	M.B Din	15.66	15.66	1

				Procurem	ent Status
Sr.		District	Total	Comp-	In
No.	Package Name	Name	Damage	leted	Process
511	Road from 15-R, Ratto to Bahri.	M.B Din	1.33	1.33	
512	Road from Pahrianwali to Jokalian.	M.B Din	14.02	14.02	
513	Road from Pindi Alhiani Saim Nullah to Warra Chamian via Majhi.	M.B Din	5.51	5.51	
514	Road from Chak Khawaja along Saim Nullah.	M.B Din	6.59	6.59	
515	Road from Faruknpur to Qadirabad.	M.B Din	4.43	4.43	
516	Road from Matto to Melu Konna.	M.B DIN	1.06	1.06	
517	Bhutta Peeran i/c Link Road of Siddiqabad Nau and Siddiqabad Kohna.	M.B Din	9.13	9.13	
518	Road from Dewan Chowk to Melu Nau via Mailu Kohna.	M.B Din	8.29	8.29	
519	Road from Jago Primary School to Cock Shawl (Jungle).	M.B Din	3.13	3.13	
520	Road from Rasul Pur to Noor Jamal.	M.B Din	7.68	7.68	
521	Road from 15-R to Saida via Thatta Khan Muhammad.	M.B Din	5.19	5.19	
522	Road from Chhoranwala to Charanwala.	M.B Din	5.75	5.75	
523	Road from Bahri Goal Karra.	M.B Din	1.45	1.45	
524	Road from Qadirabad to Chook Kalan i/c Jago Link.	M.B Din	3.33	3.33	
525	Road from Nawan Lok to Cheto.	M.B Din	3.61	3.61	
526	Road from Waryam to Lakha Kadhar.	M.B Din	3.90	3.90	
527	Road from Jano Chak to Basi.	M.B Din	5.24	5.24	
528	Road from Sarang to Kala Shadian.	M.B Din	3.46	3.46	
529	Road from Bahri to Randiali.	M.B Din	2.66	2.66	
530	Road from Kotli Khurd to Rajoa via Bhinder.	M.B Din	7.66	7.66	
531	Road from Thatha Hast to Noor Pur.	M.B Din	1.42	1.42	
532	Road from Loha Tibba to Noor Pur.	M.B Din	7.60	7.60	
533	Road from Jano Chak to Ranmal via Pindi Kalu.	M.B Din	10.39	10.39	
534	Road from Korray Karam Shah to Dewan Chowk.	M.B Din	2.07	2.07	
535	Road from Burj Bukhat to Chakorri via Siddigabad.	M.B Din	3.87	3.87	
536	Road from Paharianwali to Rajoa.	M.B Din	7.94	7.94	
537	Road from Basti Makhdom to Haveli Manak	M.B Din	7.35	7.35	
538	Repair / rehabilitation of road from Sohdra to Rana via Behram upto Nawgeryan road in Tehsil Wazirabad District Guiranwala Length = 8.80 km	Gujranwala	30.81	30.81	
539	Repair / rehabilitation of road from Muslim road Tally wala via Haripur Laveriwala Patokey Narokey in Tehsil Wazirabad District Guiranwala. Length = 10.50 km	Gujranwala	18.33	18.33	
540	Repair / rehabilitation of road from Naeem Colony to Natho Lok via Ram Ggarh in Tehsil Wazirabad District Gujranwala. (Length = 4.70 kms)	Gujranwala	11.56	11.56	
541	Repair / rehabilitation of flood damages of Sohdra link road to Behram chowk via circular road in Tehsil Wazirabad District Gujranwala Length = 5200 Rft	Gujranwala	6.23	6.23	
542	Repair / rehabilitation of road from Wazirabad Sialkot Kashmir road Lala Shah Dera to Sohdra in Tehsil Wazirabad District Guiranwala. Length = 0.7 km	Gujranwala	3.09	3.09	
543	Repair/rehabilitation of road from Head Khanki road to Gorali in Tehsil Wazirabad District Gujranwala. Length =1.0km.	Gujranwala	3.14	3.14	
544	Repair/rehabilitation of road from old G.T road Passing through Wazirabad city upto District boundary Gujranwala District Gujranwala. Length = 1165 Rft	Gujranwala	3.84	3.84	
545	Repair/rehabilitation of road Khanki Chinawan to Thatti Baloch link road in Tehsil Wazirabad District Gujranwala. Length =0.66km	Gujranwala	1.31	1.31	
546	Repair/rehabilitation of road from Gujranwala Alipur Qadirabad road to Burj Tasha link road in Tehsil Wazirabad District Gujranwala. Length=2 km	Gujranwala	8.84	8.84	
547	Repair/rehabilitation of road from Jamake to Lundpur in Tehsil Warzirabad District Gujranwala. Length=2.80 km	Gujranwala	7.89	7.89	
548	Repair/rehabilitation of road from Chak Ram Das to Taphnala in Tehsil Kamoke District Gujranwala. Length = 5.00 kms.	Gujranwala	17.87	17.87	
549	Repair/rehabilitation of road Wahndo to Chak Ramdas. In Tehsil	Gujranwala	9.12	9.12	

				Procurem	ent Status
Sr.		District	Total	Comp-	In
No.	Package Name	Name	Damage	leted	Process
550	Repair/rehabilitation of road from Dholan to Manjpur in Tehsil Kamoke District Guiranwala, Length = 2.50 kms	Gujranwala	13.93	13.93	
551	Repair/rehabilitation of road from Nangal Doona Singh to Hardo Chak in Tehsil Kamoke District Gujranwala Length = 6.00 kms	Gujranwala	5.65	5.65	
552	Repair/rehabilitation of road from Kamoke to Nangal Doona Singh in Tehsil Kamoke Gujranwala Length = 20 kms	Gujranwala	3.80	3.80	
553	Repair/rehabilitation of road from Sadhoki to Guna Aur Mandheer in Tehsil Kamoke District Gujranwala length = 16 kms	Gujranwala	7.29	7.29	
554	Repair/rehabilitation of Qazi Kot Link road in Tehsil Kamoke District Gujranwala Length = 2.5 kms.	Gujranwala	7.33	7.33	
555	Repair/rehabilitation of road from GT. Road to Dargah Pur Via Manhais Bharoke Virkan in Tehsil Kamoke District Gujranwala. Length = 5.00 kms	Gujranwala	23.36	23.36	
556	Repair/rehabilitation of road from Nangal Doona Singh road to Mandiala Poonch Teshil Kamoke District Gujranwala Length = 2624 Rft.	Gujranwala	6.82	6.82	
557	Repair/rehabilitation of road of Village Chandali in Tehsil Kamoke District Gujranwala Length = 3936 Rft.	Gujranwala	10.13	10.13	
558	Repair/rehabilitation of road from Sadoke road to Baig Pur road Village Saleh Pur in Tehsil Kamoke District Gujranwala Length = 10496 Rft	Gujranwala	12.01	12.01	
559	Repair/rehabilitation of road from Sadhoke to Guna Aur road village Tamboli in Tehsil Kamoke District Gujranwala Length = 15010 Rft	Gujranwala	31.64	31.64	
560	Repair/rehabilitation of road Chak Hindha in Tehsil Kamoke District Gujranwala. L=2.15 kms.	Gujranwala	13.23	13.23	
561	Repair/rehabilitation of road from Ashraf Abad to Mehal virkan Ghumanwala road in Teshil Kamoke Length = 3936 Rft.	Gujranwala	6.06	6.06	
562	Repair/rehabilitation of road from Haider rice mill to Ghuman wala road to Saim Pull in Tehsil kamoke District Gujranwala. Length= 2.90 km.	Gujranwala	5.69	5.69	
563	Repair/rehabilitation of road from Tatlay Aali Kamoke road to Purarey in Tehsil Kamoke District Gujranwala. L= 2.82 kms.	Gujranwala	8.30	8.30	
564	Repair/rehabilitation of road from Tatlay Aali road to Kamoke road link Khangoray in Tehsil Kamoke District Gujranwala Length = 3096 Rft.	Gujranwala	4.42	4.42	
565	Repair/rehabilitation of road of Tibba Muhammad Nagar Gulshan Chowk remaining portion in Tehsil Kamoke District Gujranwala Length = 1734 Rft.	Gujranwala	6.16	6.16	
566	Repair/rehabilitation of road from Qayyam Pur to Harpoke in Tehsil Kamoke District Gujranwala. Length = 4.60 kms.	Gujranwala	5.14	5.14	
567	Repair/rehabilitation of road from G.T road Ghania to Chajjoke in Tehsil Kamoke District Gujranwala Length = 6312 Rft.	Gujranwala	9.56	9.56	
568	Repair/rehabilitation of road from Kinger Wali more to Akbar Ghanoke in Tehsil Kamoke District Gujranwala. L= 2.30 kms.	Gujranwala	5.65	5.65	
569	Repair/rehabilitation of road from Mangat to Sohawa length = 8.7 kms in Tehsil Kamoke District Gujranwala Length = 8.7 kms.	Gujranwala	6.46	6.46	
570	Repair/rehabilitation of road from Kali Suba Wahndo road to Kotli Maqbara Via Trang in Tehsil Kamoke District Gujranwala Length = 1.5 kms	Gujranwala	4.18	4.18	
571	Repair/rehabilitation of road from Main wali Bunglow Sadhoke to Wandho Via Bagh Wala Mirza Jan District Gujranwala. Length = 2100 Rft	Gujranwala	3.15	3.15	
572	Repair/rehabilitation of road from Wahndo road to Mughal Pura link Length = 1 Km.	Gujranwala	5.23	5.23	
573	Repair/rehabilitation of road from Wahndo road to Nangray District Gujranwala. Length = 1.5 kms	Gujranwala	6.58	6.58	
574	Repair/rehabilitation of road from Lalu Pur road to Tatlay Mali District Gujranwala (L = 3 kms)	Gujranwala	14.77	14.77	

				Procurem	ent Status
Sr. No.	Package Name	District Name	Total Damage	Comp- leted	In Process
575	Repair/rehabilitation of road from Channian Mora to Ajan Chak District Gujranwala. (Length = 6.95 kms)	Gujranwala	16.20	16.20	
576	Repair/ Rehabilitation of Road Shameer to Shahdi Khan in tehsil Kamoke District Gujranwala (length = 3.10 Kms)	Gujranwala	11.05	11.05	
577	Repair/ Rehabilitation of Sohawa Kalu Kalan Road to Mangat.(length = 4.00 Kms)	Gujranwala	13.85	13.85	
578	Repair/ Rehabilitation of Kali Suba Ferozewala Road to Chak Ramdas Purenpur. (length = 1.50 Kms)	Gujranwala	4.79	4.79	
579	Repair/ Rehabilitation of Sadhoke Mianwali Banglow Road Section (Nawab Chowk to Kotli Mahararian)	Gujranwala	21.98	21.98	
580	Repair/Rehabilitation of Road From Thatha Galeb Singh to Tafnala in tehsil Kamoke District Gujranwala (Length = Kms)	Gujranwala	9.03	9.03	
581	Repair /Rehabilitation of Road From Sohawa Kalu Kalan Road to Mirza jahan. (Length = 1.25 Kms)	Gujranwala	2.99	2.99	
582	Repair /Rehabilitation of Road From Rehmatabad to Doburchi Bhegha (Length = 1.00 Kms)	Gujranwala	3.22	3.22	
583	Repair /Rehabilitation of Road From Wahndo Road to Kuri kot in tehsil Kamoke District Gujranwala (Length = 3.20 Kms)	Gujranwala	13.90	13.90	
584	Repair /Rehabilitation of Road From Aminpur Sayedan to Mandiala Tega in tehsil Kamoke District Gujranwala (Length = 22.661 Kms)	Gujranwala	22.53	22.53	
585	Rehabilitation of road from Eminabad Road to Dera Baghat Wala (Length = 2.7 Kms)	Gujranwala	4.72	4.72	
586	Rehabilitation of Road from Eminabad Road to Kamoke Rajbah via Goppi Ray (Length = 5.00 Kms)	Gujranwala	14.79	14.79	
587	Rehabilitation of Road from Rajbah Goppi Ray to Bhaanpur (Length = 1.08 Kms)	Gujranwala	7.54	7.54	
588	Rehabilitation of Road From Chandiala to Kingharwali (Length = 2.02 Kms)	Gujranwala	8.02	8.02	
589	Rehabilitation of Road From Eminabad Dharam kot Road to Kot Hanif (Length = 4.05 Kms)	Gujranwala	2.96	2.96	
590	Rehabilitation of Road Maray wain to Nandpur (L = 2.05 Kms)	Gujranwala	5.58	5.58	
591	Rehabilitaion of road from Habib Pura to Dera Isaian Singh wala to Dera Niab Gujjar in tehsil kamoke.	Gujranwala	6.90	6.90	
592	Rehabilitation of road from Baigh pur road to Niolan wali	Gujranwala	7.24	7.24	
593	Rehabilitation of road from Rasul Nagar road to Behar Shah Chandali road	Gujranwala	4.98	4.98	
594	Rehabilitation of road from Maju chak to Bharoke Virkan	Gujranwala	1.41	1.41	<u> </u>
595	Rehabilitation of road from Tatalay Aali to Mari Thakran	Gujranwala	5.94	5.94	
596 597	Rehabilitation of road from Kotli Nagra to Mianwali Sadhoke road	Gujranwala	4.74	4.74	
508	VIA TOKERIAN Pehabilitation of road from Pacrur road to Dera Serkaran	Guiranwala	5 50	5 50	
599	Restoration / Reconstruction of Link Road Sherpur to Abdullah	Jehlum	3.86	3.86	
600	Restoration / Reconstruction of Link Road Pinanwal to Dewanpur Tehsil PD Khan (L:2.22 KM)	Jehlum	4.16	4.16	
601	Restoration / Reconstruction of Link Road from Chak shadi	Jehlum	6.79	6.79	
602	Restoration / Reconstruction of Link Road form Jati pur Tehsil PD Khan (1:3.78 KM)	Jehlum	6.31	6.31	
603	Restoration / Reconstruction of Link Road Mirza pur to Khotian Tehsil PD Khan (L:1.70 KM)	Jehlum	4.35	4.35	
604	Restoration / Reconstruction of Link Road Khotian to Azam pur Tehsil PD Khan (L:3.32 KM)	Jehlum	7.06	7.06	
605	Restoration / Reconstruction of Link Road Dharyala Jalip to Khotian Tehsil PD Khan (L:2.84 KM)	Jehlum	4.82	4.82	
606	Restoration / Reconstruction of Link Road Chak Hameed to Fatehabad Tehsil PD Khan (L:2.00 KM)	Jehlum	6.24	6.24	
607	Restoration / Reconstruction of Link Road Dingwal Tehsil PD Khan (L:0.67 KM)	Jehlum	2.45	2.45	

				Procurem	ent Status
Sr. No.	Package Name	District Name	Total Damage	Comp- leted	In Process
608	Restoration / Reconstruction of Link Road Adowal Tehsil PD Khan (L:3.00 KM)	Jehlum	1.92	1.92	
609	Restoration / Reconstruction of Link Road Harnpur to Sauwal Tehsil PD Khan (L:6.00 KM)	Jehlum	8.84	8.84	
610	Restoration / Reconstruction of Link Road Dharyala Jalip to Gharibwal Tehsil PD Khan (L:5.84 KM)	Jehlum	7.66	7.66	
611	Restoration / Reconstruction of Link Road Perowala Kot Harn Pur Eastern Tehsil PD Khan (L:1.50 KM)	Jehlum	1.97	1.97	
612	Restoration / Reconstruction of Link Road Harnpur to Nonawali Tehsil PD Khan (L:1.25 KM)	Jehlum	2.87	2.87	
613	Restoration / Reconstruction of Link Road Kot PhapraTehsil PD Khan (L:1.50 KM)	Jehlum	2.96	2.96	
614	Restoration / Reconstruction of Link Road Qammar Tehsil PD Khan (L:1.00 KM)	Jehlum	3.38	3.38	
615	Restoration / Reconstruction of Link Road Naich Tehsil PD Khan (L:0.86 KM)	Jehlum	2.18	2.18	
616	Restoration / Reconstruction of road from PD Khan to Pither Klan to Pither Nadi Tehsil PD Khan (L:8.00 KM)	Jehlum	11.10	11.10	
617	Restoration / Reconstruction of Link Road Mandhar Tehsil PD Khan (L:1.00 KM)	Jehlum	2.36	2.36	
618	Restoration / Reconstruction of Link Road Meery Tehsil PD Khan (L:1.74 KM)	Jehlum	3.31	3.31	
619	Restoration / Reconstruction of Link Road Jandran Tehsil PD Khan (L:0.50 KM)	Jehlum	1.46	1.46	
620	Restoration / Reconstruction of Link Road Rajsar Tehsil PD Khan (L:1.50 KM)	Jehlum	5.05	5.05	
621	Restoration / Reconstruction of Link Road Esawal Tehsil PD Khan (L:2.00 KM)	Jehlum	5.21	5.21	
622	Restoration / Reconstruction of Link Road Sagharpur to Svedanwala Tehsil PD Khan (L:2.00 KM)	Jehlum	3.61	3.61	
623	Restoration / Reconstruction of Link Road Sherpur to Sagharpur Tehsil PD Khan (L:3.00 KM)	Jehlum	2.57	2.57	
624	Restoration / Reconstruction of Link Road Khotian to Dharvala Jalab Western Tehsil PD Khan (L:2.00 KM)	Jehlum	1.29	1.29	
625	Restoration / Reconstruction of Link Road Syed Rehman Tehsil PD Khan (L:0.61 KM)	Jehlum	1.08	1.08	
626	Restoration / Reconstruction of Link Road Chak Ali Shah, Tehsil PD Khan (L:1.50 KM)	Jehlum	3.07	3.07	
627	Restoration / Reconstruction of Link Road Saghar Pur toBhabanwala Tehsil PD Khan (L:1.75 KM)	Jehlum	1.28	1.28	
628	Restoration / Reconstruction of Link Road Kotla Syedan Tehsil PD Khan (L:1.00 KM)	Jehlum	2.77	2.77	
629	Restoration for Flood Damages of Link Road from Matial to Bundana Jattan and Bundana Ghakhran, UC Bokan District Jhelum (L:1.50 KM)	Jehlum	6.51	6.51	
630	Restoration / Reconstruction of Link Road from Passport Office to Mujahid Abad, Jhelum (L:0.76 KM)	Jehlum	3.82	3.82	
631	Restoration / Reconstruction of Link Road G.T. Road to Domeli, Tehsil Sohawa, District Jhelum (L:13.75 KM)	Jehlum	25.54	25.54	
632	Flood/ Rain Damages Link Road Gattar Chowk to Bhait, Tehsil Sohawa, District Jhelum (L:10.00 KM)	Jehlum	16.44	16.44	
633	Restoration / Reconstruction of Link Road Kara to Kot Katcha Tehsil PD Khan (L:7.00KM)	Jehlum	9.07	9.07	
634	Restoration / Reconstruction of Link Road Peerowala Kot to Hern Pur Western Tehsil PD Khan (L:4.5 KM)	Jehlum	9.94	9.94	
635	Restoration / Reconstruction of Link Road Ahmad Abad to Bugga Sial Tehsil PD Khan (L:22.90 KM)	Jehlum	25.61	25.61	
636	Restoration / Reconstruction of Link Road Lilla to Bugga Via Dhudi Thall Tehsil PD Khan (L:12.00 KM)	Jehlum	9.89	9.89	
637	Restoration / Reconstruction of Link Road PD Khan to Kaslian Phatak via Sodhi Gujjar Tehsil PD Khan (L:6.00KM)	Jehlum	15.55	15.55	

				Procurem	ent Status
Sr. No.	Package Name	District Name	Total Damage	Comp- leted	In Process
638	Restoration / Reconstruction of Link Street Dhakki Kotal Kund	Jehlum	2.93	2.93	
639	Restoration / Reconstruction of Link Road from Ketchery Chowk to Comprehencive High School Jhelum city	Jehlum	1.59	1.59	
640	Restoration / Reconstruction of Link Road Mehmood Abad to Ghulam Ahmed Road Kala Gujran via Aima Jattan TehsilJhelum	Jehlum	6.00	6.00	
641	Restoration / Reconstruction of Link Road from Karim Pura to Ghulam Ahmed Road Kala Gujran via Phulaian Tehsil Jhelum	Jehlum	9.78	9.78	
642	Restoration / Reconstruction of Link Road from Ibadat Chowk to Dera Malkan Tehsil Jhelum.	Jehlum	8.06	8.06	
643	Restoration / Rehabilitation of PCC Road & Nullah Bilal Town Jhelum	Jehlum	22.52	22.52	
644	Restoration / Rehabilitation of PCC Road Freshco Bakery to Jinazah Gah, Qabristan Chowk Jhelum	Jehlum	3.38	3.38	
645	Restoration / Rehabilitation of River road along with construction of Nullah TMA Jhelum	Jehlum	2.72	2.72	
646	Restoration / Reconstruction of Link Road Shah Jhanda Chowk to Phudial Tehsil Sohawa	Jehlum	2.07	2.07	
647	Restoration / Reconstruction of Link Road Sanatha to Chajja Tehsil Dina	Jehlum	4.03	4.03	
648	Restoration / Reconstruction of Link Road Jandala to Gatter Tehsil Sohawa	Jehlum	2.03	2.03	
649	Restoration / Reconstruction of Main road village Muftian to village Behram Pur UC 23 Dina Tehsil Dina	Jehlum	4.42	4.42	
650	Sheerpur to Malchan via Chougpur in District Sialkot (Restoration Of Flood Damages)	Sialkot	4.04	4.04	
651	Kalma Chowk to Bharthanwala in District Sialkot (Restoration Of Flood Damages)	Sialkot	3.86	3.86	
652	Rangpur Srochan to Wazir Chak via Pindi Punjoran in District Sialkot (Restoration Of Flood Damages)	Sialkot	6.01	6.01	
653	Khojay Chak to Pull Bajwan via Pindi Pitrara in District Sialkot (Restoration Of Flood Damages)	Sialkot	17.40	17.40	
654	Bahadarpur to Chak Baqai via Pir Sabaz in District Sialkot (Restoration Of Flood Damages)	Sialkot	10.58	10.58	
655	Kahlian to Dewera Via Phuklian in District Sialkot (Restoration Of Flood Damages)	Sialkot	15.14	15.14	
656	Lalpur to Kharota Syedan via Propi Arrain in District Sialkot (Restoration Of Flood Damages)	Sialkot	10.93	10.93	
657	Gondal Road to Kotli Loharan Via chak Rumala Punnuwal Versalpur in District Sialkot (Restoration Of Flood Damages)	Sialkot	6.19	6.19	
658	Shatab Ghara to Ganjaianwali in District Sialkot (Restoration Of Flood Damages)	Sialkot	3.20	3.20	
659	Bhabrainwala to Dhanay Road in District Sialkot (Restoration Of Flood Damages)	Sialkot	4.72	4.72	
660	Sukhnian Roras Road to Jourian in District Sialkot (Restoration Of Flood Damages)	Sialkot	4.57	4.57	
661	Sialkot Pasrur road to Gunna Kalan via Rajkot Vinjal up to Bhagowal Road in District Sialkot (Restoration Of Flood Damages)	Sialkot	15.26	15.26	
662	Ghuinki Verio Road (Malang Chowk) to Laddhar Road in District Sialkot (Restoration Of Flood Damages)	Sialkot	22.63	22.63	
663	Main Bhagowal Road to Village Kukran Road in District Sialkot (Restoration Of Flood Damages)	Sialkot	10.50	10.50	
664	Raipur to Syedanwali Road (Construction) in District Sialkot (Restoration Of Flood Damages)	Sialkot	8.42	8.42	
665	Main Rasta Village Chak Qazi to East Side in District Sialkot (Restoration Of Flood Damages)	Sialkot	6.94	6.94	
666	Main Rasta Dogranwala Village in District Sialkot (Restoration Of Flood Damages)	Sialkot	2.99	2.99	
667	Sambrial Dhanawali Road to Airport in District Sialkot (Restoration Of Flood Damages)	Sialkot	23.57	23.57	

				Procurem	ent Status
Sr. No.	Package Name	District Name	Total Damage	Comp- leted	In Process
668	Viramkay to Passia Road up to Verowala Road in District Sialkot (Restoration Of Flood Damages)	Sialkot	8.13	8.13	
669	Lodhikay to Ahmadabad Via Baidder Road in District Sialkot (Restoration Of Flood Damages)	Sialkot	8.14	8.14	
670	Kandan Sian to Begowala in District Sialkot (Restoration Of Flood Damages).	Sialkot	36.07	36.07	
671	Sian to Wadala Sanduwan in District Sialkot (Restoration Of Flood Damages)	Sialkot	18.25	18.25	
672	Ghuinke to Gidpur Muhammadpura to Gujjar Kulla in District Sialkot (Restoration Of Flood Damages)	Sialkot	7.60	7.60	
673	Rehabilitation of ghuinkeverio road (Section Ghuinke to Laddhar Chowk via Sajo Kala) in District Sialkot (Restoration Of Flood Damages)	Sialkot	11.37	11.37	
674	Sialkot Eminabad road to Trigri sharif in District Sialkot (Restoration Of Flood Damages)	Sialkot	6.17	6.17	
675	Gujranwala Satrah Pasrur road to Jharanwal in District Sialkot (Restoration Of Flood Damages)	Sialkot	13.54	13.54	
676	Rehabilitation of Silver Star Road in District Sialkot (Restoration Of Flood Damages)	Sialkot	3.73	3.73	
677	Rehabilitation of Moutra Badiana Road in District Sialkot (Restoration Of Flood Damages)	Sialkot	18.62	18.62	
678	Silver Star Factory to Jamkay Cheema Road in District Sialkot (Restoration Of Flood Damages)	Sialkot	5.28	5.28	
679	Fazalabad to Gudiala West in District Sialkot (Restoration Of Flood Damages)	Sialkot	11.47	11.47	
680	Akbar Chowk to Wadala Sanduwan in District Sialkot (Restoration Of Flood Damages)	Sialkot	12.87	12.87	
681	Daska Pull Nehar Cheema Hospital Village Raja Ghuman in District Sialkot (Restoration Of Flood Damages)	Sialkot	17.24	17.24	
682	Changa Road GT Road Daska to Jahangir Via Chanaga i/c Both Side Drain in District Sialkot (Restoration Of Flood Damages)	Sialkot	6.52	6.52	
683	Villge Thatta to Talhara in District Sialkot (Restoration Of Flood Damages)	Sialkot	6.68	6.68	
684	Badiana to Bharokay in District Sialkot (Restoration Of Flood Damages)	Sialkot	11.70		11.70
685	Kul Bajwa to Pasrur via Taqi Pur Road in District Sialkot (Restoration Of Flood Damages)	Sialkot	19.46	19.46	
686	Qila Kalarwala to New Manga Road in District Sialkot (Restoration Of Flood Damages)	Sialkot	12.19	12.19	
687	Bun Bajwa Adda Sydanwali to Village Bun Bajwa Road in District Sialkot	Sialkot	10.83	10.83	
688	Pull Nehar Seoki Dewanwala to Sohavi Surangi Pull Saleki Ranki Baharipur Propi Nagra, Chak Propi, Kalaykay Nagra, Admkay Nagra in District Sialkot (Restoration Of Flood Damages)	Sialkot	6.32	6.32	
689	Sukanwind to Uddo Fateh Ratta Jathol Loharanwali in District Sialkot (Restoration Of Flood Damages)	Sialkot	9.91	9.91	
690	Mundayke Barian to Buttar Dogran (Chawinda Road) in District Sialkot (Restoration Of Flood Damages)	Sialkot	16.04	16.04	
691	Bhopalwala to Fateh Ghar via Sahuwala, Nishterabad	Sialkot	80.97		80.97
692	Head Marala to Chaprar road over Marginal Bund of River Tavi Bund	Sialkot	54.32		54.32
693	Darbar Haji Abdul Nabi Sahib road u/c Habib Pura	Sialkot	1.89		1.89
694	Seminar Road To Moh: Shujabad U/C Neka Pura	Sialkot	3.93		3.93
695	Murray college road u/c Karim Pura	Sialkot	2.00		2.00
696	Maharaja Road u/c Karim Pura	Sialkot	4.90		4.90
697	Silver Star Road u/c Water Works	Sialkot	2.03		2.03
698	Main Road Hayyat Pura from Zafarwal road to Doubrji Aranian u/c Habib Pura	Sialkot	1.66		1.66
699	Ban road Haji Road u/c Haji Pura	Sialkot	2.09		2.09
700	Construction/ Repair of Afshan Road Daska	Sialkot	2.70		2.70
701	Construction/ Repair of Shahb Pura Road Daska	Sialkot	4.54		4.54

				Procurem	ent Status
Sr.		District	Total	Comp-	In
No.	Package Name	Name	Damage	leted	Process
702	Construction/ Repair of Pasrur by pass Road Daska	Sialkot	2.25		2.25
703	Construction/ Repair of City Road near AC office Daska Dual	Sialkot	3.03		3.03
704	Muzafar Ghar road to Buch (Gagra Katchoor)	Multan	2.60	2.60	
705	Nakra Shaheed to Pull Mukhtar Shah	Multan	1.06	1.06	
706	Hassan Buksh Chowk to Pull Peer jamal to Nakra Shareef	Multan	3.19	3.19	
707	Gagra Katchoor road (Zafar Wala Chowk) to buch road via Haii		4.40	1.10	
707	Sufi Jhoke	Multan	1.10	1.10	
708	Restoration / Rehabilitation of Road from Sahari Gaga to Abadi Hussain Dogar via Dhari Samand Watto (Sharif Poultry Farm) L=0.85 Km	Kasur	5.15	5.15	
709	Detailed Estimate For (R.F.D) Khushab Sandral Ranjar Road up to District Boundary length 32.50 Km in District Khushab.	KHUSHAB	7.41	7.41	
710	Detailed Estimate For (R.F.D)Rehabilitation of Road from Main Khushab Muzaffaargarh Road to Link Road Village Sath Shahani.	KHUSHAB	1.89	1.89	
711	Detailed Estimate For (R.F.D)Rehabilitation of Road from Main Khushab Girote Road to Link Road Village Mohibpuir Zarein Length 1.00Km.	KHUSHAB	1.01	1.01	
712	Restoration / Rehabilitation of Mettaled Road From Kot Pindi Das to Wandiala Nasir in Tehsil Muridke District Sheikhupura Length: 1.50 KM.	Sheikhupur a	2.55	2.55	
713	Construction of Mettaled road from Sheikhupura Muridke Road to Khutiala Virkan in Tehsil Muridke District Sheikhupura Length: 2.20 KM.	Sheikhupur a	3.38	3.38	
714	Rehabilitation of Mettaled Road From Muridke Narowal Road Hatchar Stop to Manj Gaghar (Remaining Portion) in Tehsil muridkedistrict Sheikhupura Length : 1.10 KM.	Sheikhupur a	3.65	3.65	
715	Rehabilitation / Construction of Mettaled Road from Jia Musa Road to Goul Masjid via Jhall Wala Bridge in Tehsil Ferozewala District Sheikhupura Length : 6.35 KM.	Sheikhupur a	3.66	3.66	
716	Widening / Improvement of Mettaled Road from Lathay Pur to Tharian via Mubarak Pura in District Sheikhupura Length: 4.85 KM.	Sheikhupur a	4.01	4.01	
717	Construction / Rehabilitation of Mettaled Road from Kala Khtai road Bye Pass Chitta Pull to Government Boys High School Narang in Tehsil Muridke District Sheikhupura Length: 1.2 KM.	Sheikhupur a	4.08	4.08	
718	Construction of Mettaled road from Lahore Jaranwala Road to Mahtam in Tehsil Sharaqpur District Sheikhupura Length: 2.10 KM.	Sheikhupur a	4.53		4.53
719	Rehabilitation of Mettaled Road From G.T Road to Govt. Girls Digree College Ferozewala, in Tehsil Ferozewala District Sheikhupura Length : 0.76 KM.	Sheikhupur a	2.86	2.86	
720	Rehabilitation of Mettaled Road From G.T Road to Pathan Colony in Tehsil Ferozewala District Sheikhupura Length : 1.62 KM.	Sheikhupur a	4.95	4.95	
721	Rehabilitation of Mettaled Road from G.T Road Haider Road to Dera Thallay Wala in Tehsil Ferozewala District Sheikhupura Length: 1.30 KM.	Sheikhupur a	5.63	5.63	
722	Rehabilitation of Mettaled Road from Chaura Rajputaan to Kot Sayedan in Tehsil Muridke District Sheikhupura Length: 2.00 KM.	Sheikhupur a	6.17	6.17	
723	Construction of Mettaled road from G.T road Dera Nazir Shah in Tehsil Muridke District Sheikhunura Length: 3 50 KM	Sheikhupur	7.57	7.57	
724	Restoration / Rehabilitation of Mettaled Road From Muridke Sheikhupura Road to Fatehpur Length : 2.50 KM.	Sheikhupur a	7.07	7.07	
725	Construction of Mettaled road from G.T road Sheikhupura Bedad Pur Via Alu in Tehsil Muridke District Sheikhupura Length: 5.00 KM.	Sheikhupur a	9.62		9.62
726	Rehabilitation of Mettaled Road From Saim Pull Mardana to Malik Pur Tehsil muridkelength : 2.94 KM.	Sheikhupur a	3.06	3.06	
727	Rehabilitation / Construction of Mettaled Road from Shell Petrol	Sheikhupur	11.92	11.92	

				Procurement Status	
Sr. No.	Package Name	District Name	Total Damage	Comp- leted	In Process
	Pump G.T Road to Ali Pur Tibba in District Sheikhupura Length 4.60 KM.	а			
728	Construction of bridge Over Daik Nallah Near Malik Pur Village I/C Approach Road In Tehsil Muridke District Sheikhupura.	Sheikhupur a	12.46		12.46
729	Construction of Mettaled road from Ladhaywala Virkan to Raj Pura in Tehsil Muridke District Sheikhupura Length: 3.50 KM.	Sheikhupur a	13.17	13.17	
730	Construction of Mettaled road from MR link BRB Gharyal Kalan to Shamsa in Tehsil Muridke District Sheikhupura Length: 5.00 KM.	Sheikhupur a	13.05	13.05	
731	Construction / Rehabilitation of Mettaled Road From Narang Road Batta Chowk to Narowal Road Via Baway Wala I/C Nangal Kaswala in Tehsil Muridke District Sheikhupura Length: 16.83 KM.	Sheikhupur a	14.41	14.41	
732	Rehabilitation of Mettaled Road from GT Road to Shamke Tehsil Ferozewala District Sheikhupura (L=5.20Km)	Sheikhupur a	15.40	15.40	
733	Rehabilitation of Mettaled Road from Burj Attari to Sheikhupura Sharaqpur Road Via Bridge Canal in Tehsil Sharaqpur District Sheikhupura Length: 12.60KM.	Sheikhupur a	17.79	17.79	
734	Rehabilitation of Mettaled Road from G.T Road to Bhullay Bhani Wall to Kala Khtai Road Length: 5.25KM.	Sheikhupur a	15.43		15.43
735	Rehabilitation of Mettaled Road From Mehta Suja Canal Road BRB Canal Merowal Pull in Tehsil muridkedistrict Sheikhupura Length : KM.	Sheikhupur a	12.59	12.59	
736	Rehabilitation of Mettaled Road from G.T Road to Old Narang road in Tehsil Muridke District Sheikhupura Length: 4.50 KM.	Sheikhupur a	22.50		22.50
737	Rehabilitation of Sheikhupura Sharaqpur Road to Thabal Mah Devi Road in Tehsil Sharaqpur District Sheikhupura Length: 9.20 KM.	Sheikhupur a	30.17	30.17	
738	SAMMA ROAD TO MUREED, LENGTH=6.00 KM IN DISTRICT MANDI BAHAUDDIN	M.B Din	5.53		5.53
739	PC-I/ ROUGH COST ESTIMATE FOR RESTORATION OF MIANWAL RANJHA TO SAIDA VIA QADIR ABAD DISTRICT MANDI BAHAUDDIN	M.B Din	1.51		1.51
740	CHUNGI NO.2 TO DAMN-E-KHIZAR PARK,MALIKWAL IN DISTRICT MANDI BAHAUDDIN	M.B Din	1.69		1.69
741	ROAD FROM PINDI BHATTIAN CHINIOT ROAD TO SARGHODHA ROAD(MINI BY-PASS), L=2.4 KM	HAFIZABA D	57.74	57.74	
742	REHABILITATION OF ROAD FROM SADHOKE TO MAJU CHAK ROAD IN VILLAGE GHUMMA IN TEHSIL KAMOKE	Gujranwala	12.87		12.87
743	REHABILITATION OF ROAD DERA ASSIAN	Gujranwala	23.01		23.01
744	REHABILITATION OF ROAD FROM DERGA PUR TO GOGA	Gujranwala	12.86		12.86
745	REHABILITATION OF ROAD FROM GHUMA TO QIYAM PUR	Gujranwala	12.87		12.87
746	THE DETAIL OF ESTIMATE FOR RESTORATION OF ROAD SHAH MALOOK GRAVEYARD TO LRBT HOSPITAL PASRUR	SIALKOT	3.42		3.42
747	GHANIA THATHI MUREED ROAD TO BURJ GHANIA, LENGTH=1.00 KM IN DISTRICT MANDI BAHAUDDIN	M.B Din	1.77		1.77
748	LOHA TIBBA TO LASOORI, LENGTH=5.00 KM IN DISTRICT MANDI BAHAUDDIN	M.B Din	6.70		6.70
749	THATHA KHAN MUHAMMAD TO QADIRABAD, LENGTH= 5.00 KM IN DISTRICT MANDI BAHAUDDIN	M.B Din	6.36		6.36
750	RESTORATION OF FLOOD AFFECTED ROAD FROM MACHIKEY SANDHWAN TO TARONIAN,IN TEHSIL KAMOKE	Gujranwala	17.46		17.46
751	REHABILITATION OF ROAD FROM KHANGURA TO GOGA VIA QILA JHANDA SINGH	Gujranwala	11.32		11.32
752	REHABILITATION OF ROAD FROM TIBA MUHAMMAD NAGAR RAILWAY LINE TO BARF KHANA	Gujranwala	3.78		3.78
753	Rough Cost Estimate for repair and construction of road Bahar Shah road, TMA Aziz Bhatti Town Lahore.	LAHORE	1.56		1.56
754	Restoration Of Wadda Vera Sheesh Mahal Ghati, Mohalla Sathan, Jogi Mohalla, Peer Taj Street, Qadri Buksh Street And Mohalla Aurangzaib's Street UC.29	LAHORE	3.04		3.04

				Procurem	ent Status
Sr. No.	Package Name	District Name	Total Damage	Comp- leted	In Process
755	REHABILITATION OF FROM ADDORAY TO MARALIWALA (LENGTH = 6.00 kms)	Gujranwala	28.71		28.71
756	REHABILITATION OF MARALI TO QILA DESSA SINGH (LENGTH = 4.04 kms)	Gujranwala	15.85		15.85
757	REHANILITATION OF ROAD FROM PEPLIWALA TO THEIR SANSI (LENGTH = 1.90 kms)	Gujranwala	11.86		11.86
758	REHABILITATION OF ROAD FROM KROTANA TO BAKAR KOT (LENGTH = 1.50 kms)	Gujranwala	11.26		11.26
759	REHABILITATION OF ROAD FROM CIRCULER ROAD TO OLD G.T ROAD VIA UNDER PASS IN TEHSIL WAZIRABAD (LENGTH = 800 Rft)	Gujranwala	1.21		1.21
760	REHABILITATION OF ROAD FROM W.S.K.ROAD TO DEGREE COLLEGE ROAD IN TEHSIL WAZIRABAD (LENGTH = 4835 Rft)	Gujranwala	4.34		4.34
761	REHABILITATION OF RAOD FROM DOUBLE L-XING ALLAHWALA CHOWK TO HABIB BANK AT W.S.K ROAD IN TEHSIL WAZIRABAD (LENGTH = 2400 Rft)	Gujranwala	5.19		5.19
762	Restoration of flood damages 2014 of MR from Basti Jarian Wala to Peer Kamal Length 3 Km.	Muzafargar h	1.15		1.15
763	SIALKOT EMINABAD ROAD TO TRIGRI SHARIF	SIALKOT	6.16		6.16
764	PASRUR ROAD BYPASS DASKA TO SIALKOT ROAD BYPASS UPTO FAMILY HOSPITAL SAMBRIAL ROAD TO NAWAZ SHARIF STADIUM TO BRB NEHAR PULL DASKA	SIALKOT	22.85		22.85
765	THE DETAIL OF ESTIMATE FOR RESTORATION OF ROAD SHAH BABAN GATE TO GULZA-E- MADINA MOSQUE PASRUR	SIALKOT	1.41		1.41
766	Rehabilitation of road from Gorakhpur to Chountra (Km 13.55 to Km 33) length = 19.45 KM Rawalpindi	Rawalpindi	27.97	27.97	
767	PC-I/ ROUGH COST ESTIMATE REHABLITATION OF FLOOD DAMAGES ON MOUTRA BADIANA ROAD (SECTION PEERO CHAK TO BADIANA) LENGTH=10.75 KM IN DISTRICT SIALKOT	Sialkot	75.72		75.72
768	THE DETAIL OF ESTIMATE FOR RESTORATION OF RCC ROAD FROM TEA SHOP TO NAVEED AUTO NARROWAL ROAD GODOWN ROAD PASRUR	Sialkot	2.91		2.91
769	REHABILITATION OF ROAD FROM KAMOKE TO MAJU NANGAL DOONA SINGH ROAD TO VIA NAUGRA BHATTI TO PELLO IN TEHSIL KAMOKE	Gujranwala	13.40		13.40
770	ROUGH COST ESTIMATE FOR REPAIR/REHABILITATION ROAD FROM NAHDHA TO SAKHANA BAJWA,LENGTH=3.50 KM	Gujranwala	15.85	15.85	
771	RESTORATION OF FLOOD AFFECTED ROAD FROM MACHIKEY SANDHWAN TO DHEROWALI,IN TEHSIL KAMOKE	Gujranwala	17.46	17.46	
772	ESTIMATE FOR CONSTRUCTION OH HIGH LEVEL BRIDGE FROM SAGRI MORE TO DADUCHA ROAD IN KM 7 RAWALPINDI LENGTH=300 RFT	Rawalpindi	51.20	51.20	
773	Rough Cost Estimate for Rehabilitation of Roads Wafaqi Colony Near Market UC-116	Lahore	1.61		1.61
774	Rough Cost Estimate for Rehabilitation of Roads Maraka To Gravevard UC-122	Lahore	1.26		1.26
775	Rough Cost Estimate for Rehabilitation of Darbar Haji Shah Saleem, Amna Park UC-117	Lahore	1.42		1.42
776	Rough Cost Estimate for Rehabilitation of Chowk Mola Bakhsh Link Jamal Colony UC-117	Lahore	3.67		3.67
777	Rough Cost Estimate for Rehabilitation of Ittefaq Town Towards Niaz Baig UC-117	Lahore	2.00		2.00
778	Rough Cost Estimate for Rehabilitation of Main Union Council Road UC-118	Lahore	3.76		3.76
779	Rough Cost Estimate for Rehabilitation of Katchi Kothi Towards Architect Society UC-120	Lahore	3.11		3.11
780	Rough Cost Estimate for Rehabilitation of Jan Muhammad Road	Lahore	2.58		2.58

				Procurement Status	
Sr. No.	Package Name	District Name	Total Damage	Comp- leted	In Process
	to Village Ali Pur UC-120				
781	Rough Cost Estimate for Rehabilitation of Main Road Village Barkat Pura UC-120	Lahore	2.01		2.01
782	Rough Cost Estimate for Rehabilitation of Main Road Masjid Fatima To Rasul Purta Via Aitchison Society UC-120	Lahore	2.09		2.09
783	Rough Cost Estimate for Rehabilitation of Links Road Aitchison Society, UC-120	Lahore	3.99		3.99
784	Rough Cost Estimate for Rehabilitation of Roads Sui Gas Street Links Near Shezan Bakery UC-114	Lahore	1.81		1.81
785	Rough Cost Estimate for Rehabilitation of Road Kawa Chowk Towards Waves Factory	Lahore	2.30		2.30
786	Rough Cost Estimate for Rehabilitation of Roads Byepass Union Council Road Via Fauji Farm, Manga UC-125	Lahore	1.25		1.25
787	Rough Cost Estimate for Rehabilitation of Road Main Bazar, Mohallah Ahmad Abad, Byepass Manga UC-125	Lahore	2.06		2.06
788	Rough Cost Estimate for Rehabilitation of Road Street Dr. Birth Link Shaukat Khanum Road UC-120	Lahore	2.59		2.59
789	Rough Cost Estimate for Rehabilitation of Road Mansoora Bazar UC-117	Lahore	2.16		2.16
790	Rough Cost Estimate for Rehabilitation of Main Road Manowal Chung Via Shahbaz Studio UC-121	Lahore	2.06		2.06
791	Rough Cost Estimate for Rehabilitation of Road Jagwar Chowk Towards Samsani Village UC-116	Lahore	3.09		3.09
792	Rough Cost Estimate for Rehabilitation of Roads F- Block Johar Town UC-116	Lahore	2.48		2.48
793	LINK ROAD LEHRI TO SEHR U.C LEHRI TEHSIL KAHUTA	Rawalpindi	1.24		1.24
794	Rehabilitation of mettalled road pull Panjnad Canal Mouza Bakhtiari to office Bakhtiari 2/c 71 Length 0.77 Km.	Bahawalpur	1.65		1.65
795	Rehabilitation of mettalled road office bakhtiari U/C 712 basti gurra Length = 1.86 Km.	Bahawalpur	1.91		1.91
796	Rehabilitation of mettalled road from bait Gurra to dara Yar Muhammad Bakhtirari Ghouto pull Length 1.10 Km.	Bahawalpur	1.14		1.14
797	Rehabilitation of mettalled road from bait ahmad to chak kehal basti lashari length 2.26 Km	Bahawalpur	1.53		1.53
798	Rehabilitation of metalled road from Adda Pattni bala Jhullan road to basti baddani Length = 1.51 Km.	Bahawalpur	2.59		2.59
799	PC-1 COST ESTIMATE FOR REHABILITATION OF TORRENTIAL RAINS/ FLOOD AFFECTED ROADS (RFD) ON RAWALPINDI CHIRAH LEHTRAR KOTLI SATTIAN KULYARI ROAD KM 23 TO 89	Rawalpindi	35.48		35.48
800	ESTIMATE FOR REHABLITATION OF TORRENTIAL RAINS/FLOOD AFFECTED ROADS ON KAHUTA PUNJAR AZAD PATTAN ROAD KM 39 TO 69,TEHSIL KAHUTA DISTRICT RAWALPINDI	Rawalpindi	24.81		24.81
801	PC-1 COST ESTIMATE FOR REHABILITATION OF TORRENTIAL RAINS/ FLOOD AFFECTED ON KAHUTA KAROT ROAD VIA KHALOOL KM 3 TO 29.64 LENGTH 26.64	Rawalpindi	23.91		23.91
802	PC-1 COST ESTIMATE FOR REHABILITATION OF TORRENTIAL RAINS/ FLOOD AFFECTED ON RAWALPINDI MURREE KASHMIRE ROAD KM 29 TO 85	Rawalpindi	10.75		10.75
803	PC-1 COST ESTIMATE FOR REHABILITATION OF TORRENTIAL RAINS/ FLOOD AFFECTED ROADS (RFD) ON PATRIATA TO DHIRKOT KHATWALAN LENGTH 5 KM TEHSIL KOTLI SATTIAN DISTRICT RAWALPINDI	Rawalpindi	5.00		5.00
804	PC-1 COST ESTIMATE FOR REHABILITATION OF TORRENTIAL RAINS/ FLOOD AFFECTED ROADS (RFD) ON KOTLI SATTIAN DHANDA ROAD KM 1 TO 15	Rawalpindi	12.54		12.54
805	PC-1 COST ESTIMATE FOR REHABILITATION OF TORRENTIAL RAINS/ FLOOD AFFECTED ON GHULEHRA GALI PATRIATA ROAD LENGTH 10 KM	Rawalpindi	5.94		5.94
806	PC-I/ ROUGH COST ESTIMATE REHABLITATION OF RAIN &	Sialkot	115.05		115.05

				Procurem	ent Status
Sr.		District	Total	Comp-	In
No.		Name	Damage	leted	Process
	PLOOD DAMAGES AT DASKA TO PASRUR ROAD				
807	ROAD BADIANA - CHAWINDA - ZAFARWAK KM # 25 26 & 29	Sialkot	1.73		1.73
	REHABILITATION OF ROAD FROM W.S.K ROAD TO ADD				
808	SOHDRA VIA VETENARY HOSPITAL IN YEHSIL WAZIRABAD	Gujranwala	1.09		1.09
	(LENGTH = 1.00 kms)	-			
809	PC-I/ ROUGH COST ESTIMATE FOR REHABLITATION OF	Sialkot	8 78		8 78
	SIALKOT - PASRUR ROAD KM NO.6,7,8,16 & 17	Clairtot	0.10		0.10
810	PC-1/ROUGH COST ESTIMATE FOR REHIBLITATION	Sialkot	20.51		20.51
	PC-I/ ROUGH COST ESTIMATE REHABILITATION OF FLOOD				
811	DAMAGES FOR PASRUR - THRO MANDI ROAD KM # 16,17,18	Sialkot	42.36		42.36
812	SIALKOT CHAPRAR ROAD	Sialkot	28.24		28.24
813	Metalled Road from Kala Khatai Station to Kot Aadhian and	Sheikhupur	4 08		4 08
010	Sidhan Wali Road	a	4.00		4.00
814	Restoration of flood damages 2014 of MR from KM road to	Muzafargar	5.04		5.04
		11			
815	JINNAH COLONY IN TEHSIL WAZIRABAD (1.500 Rft)	Gujranwala	2.13		2.13
040	Rehabilitation of Pindi Bhattian Bypass Road from Chinoit Road	Llafinahad	57.23	57.00	
816	to Sargodha Road (Length-2.40 km) District Hafizabad	Hafizabad		57.23	
817	Rehabilitation of Road from Mehmoodpur road to Bhoon Fazal	Hafizabad	3.33	3.33	
•	road via Khuttey Shah. L= 3.90 Kms		0.40		
818	Restoration / Reconstruction of Retaining Wall near BHU / UC	Jehlum	2.49	2.49	
	Restoration / Renair of Culvert village Sanatha LIC Ladher		1 88		
819	Tehsil Dina	Jehlum	1.00	1.88	
000	Restoration / Repair of Retaining Wall Baghan Road Tehsil	lablum	1.43	1 4 2	
820	Dina	Jenium		1.43	
821	Construction of Retaining Wall Nullah / Kass Moza Doian	Jehlum	2.44	2.44	
	Tehsil Dina		1.00		
822	Kohali Tehsil Sohawa	Jehlum	1.00	1.06	
	Rehab./Repair of Road from Garh Maharaja to Link Road Abadi		1.00		
823	Jattuwala Shah, Length = 0.50 Km	JHANG		1.00	
824	Re-const. Of Wing Walls along Saim Nallah / Bridge 2' Span 35'	Khushah	1 51	1 51	
	each on Khushab Girot road KM No.7.	Tandonab	1.01	1.01	
825	Rehabilitation of flood/rain damages of Road from Nankana-	Nankana	3.00	3.00	
	Rehabilitation of flood/rain damages ofroad from Nankana-	Nankana	2 / 8		
826	Mangtanwala Road Km 9 to Kanwaali Length 2.00 Km	Sahib	2.40	2.48	
0.07	Rehabilitation of Flood / Rain Damages of Road from Pindi Piran	Nankana	4.80	4.00	
827	to Nabi purpiran Length 14.00 km. Nankana Sahib	Sahib		4.80	
828	Rehabilitation of flood/rain damages of Road from Grid Station	Nankana	1.37	1.37	
	Bucheki to Chaindpur, Length 10.00 km	Sahib	1 1 1		
820	Chak No. 1. Wazirour Chowk via Gangapur Kot Jan Muhammad	Nankana	1.11	1 1 1	
023	Haft Mather, Length 2.00 km, Nankana Shaib	Sahib		1.11	
000	Rehabilitation / Restoration of Road from Qila Ahmed Abad to	Nerround	17.95		47.05
830	Dhamthal Road (L=0.00 to 07.00 KM Part-I) Tehsil Narowal.	Narowai			17.95
831	Rehabilitation of Bye Pass Road from Sialkot Road to Wazirabad	Sialkot	22.05	22.05	
000	Bambanwala Road Municipal Stadium Daska in District Sialkot.	Cialliot	4.00	1.00	
832	Siaikol ividraia road to VIII: Unitti Shelkhan Via Nawanpind Arriyan Rough Cost Estimate for Pehabilitation of road from Arrian	Siaikot	1.30 6.77	1.36	
833	More to Kanelwal Nepal Village PP-160 Lahore	Lahore	0.77		6.77
00.1	Side Protection (Stone Pitching) RD 140+000 to RD 141+900		25.07		05.05
834	Left & right Side of Hudiara Main Drain	Lanore			25.07
835	Rehabilitation of road from Lahore Sharqpur road to ADDA	Sheikhupura	8.43		8 43
	Fatu Wala to Bholay Shah via Chaki Ghera Thatta Bamian	Sileitapara			0.10
836	Renabilitation of road from Lanore Sharqput road to Noor	Sheikhupura	1.11		1.11
L	pur Aradiyan via Sultan Fur Ayan Fur Length 3.00 Mill	1	1		

				Procurement Status	
Sr. No.	Package Name	District Name	Total Damage	Comp- leted	In Process
837	Rehabilitation of road from Lhore Jaranwala road Saghian stop to Saghian Kalan and Saghian Mooti Fouji Length 2.00	Sheikhupura	2.10		2.10
838	Rehabilitation of road from Faiz pur interchange to Bhullay Androon road ,Length 1.60 Km	Sheikhupura	4.63		4.63
839	Rehabilitation of road from Faiz pur interchange to DeraArban via Dera Fazl Din ,Length 4.80 Km	Sheikhupura	4.22		4.22
840	Rehabilitation of Lahore road Adda Nawa Pind to Khanowal via Mooran wala ,Length 1.90 Km	Sheikhupura	3.50		3.50
841	Rehabilitation of road from Lhore Sharqpur road to Saad Par via Doseer Torian Length 3.06 Km	Sheikhupura	3.50		3.50
842	Rehabilitation of Lahore road Maddar stop to Pind Maddar, Length 0.80 Km	Sheikhupura	2.59		2.59
843	Rehabilitation of road from Sheikupura Sharqpur road to Mandianwala Lahore road via Ghazi Pur Nareenjni Length	Sheikhupura	3.56		3.56
844	Rehabilitation of road from Adda Laryian Sharqpur road to Purani Beni (Dhana) Length 1.80 Km	Sheikhupura	2.14		2.14
845	Rehabilitation of road from Sharqpur Sheikupura road to Chak No 10 Length 1.90 Km	Sheikhupura	1.46		1.46
846	Rehabilitation of road from Lhore Sharqpur road Pind Sajowal Length 1.10 Km	Sheikhupura	3.19		3.19
847	Rehabilitation of road from Lhore Sharqpur road to Lurkay Niamat Road Length 2.50Km	Sheikhupura	1.00		1.00
848	Rehabilitation of road from Sharqpur Sheikupura road to Chak No 17 UCC Length 1.50 Km	Sheikhupura	2.24		2.24
849	Rehabilitation of road from Lhore Sharqpur road to Pind Bhoaiwal, Band Road Length 0.55 Km	Sheikhupura	1.34		1.34
850	Rehabilitation of road from Lahore Sheikupura road to Pind Baddo Road Length 0.381 Km		1.19		1.19
851	Rehabilitation of Road from Kuba Chak to Jung More	Sialkot	31.74	31.74	
852	Rehabilitation of Road from Dheera Sandha to Sadrana	Sialkot	6.16	6.16	
853	Rehabilitation of Road from Progpur to Mandianwala	Sialkot	8.28	8.28	
854	Rehabilitation of Road from Ghuinke to Verio, in District Sialkot.	Sialkot	7.31	7.31	
855	Rehabilitation of Road from Bismillah Chowk to Rehmatabad (Village Kohar)	Sialkot	26.52	26.52	
856	Restoration of Flood Damages to Sialkot Chaprar Road	Sialkot	24.13	24.13	
857	Construct of Street & Drain & Culvert at Sadiguabad and Tajokev	Sialkot	5.52	-	5.52
858	REHABILITATION OF FLOOD AFFECTED TUNG UCHA LINK ROAD, L= 4.5 KMS	Gujranwala	25.57		25.57
859	Rehabilitation Of Flood Effected Nadda Link Road, L= 2600 Rft	Gujranwala	4.99		4.99
860	Rehabilitation Of Flood Affected Saib Link Roadd L= 3.5 Kms, 11500 Rft	Gujranwala	22.19		22.19
861	Rehabilitation Of Flood Affected Tung Bucha Road, (1.90 Km)	Gujranwala	12.87		12.87
862	Rehabilitation of Flood Affected Rangla Link Road, Length= 1.1 KM 1000 RFT	Gujranwala	5.24		5.24
863	Rehabilitation of Flood Affected Kotli Aima Thatha Derasa Link Road L=2.8 KMS, 9200 RFT	Gujranwala	13.82		13.82
864	Rehabilitation of Road Muhafiz Town UC-119 (Part-I)	Lahore	4.62		4.62
865	Rehabilitation of Road Muhafiz Town UC-119 (Part-II)	Lahore	4.71		4.71
866	Rehabilitation of Main Peco Road UC-117	Lahore	5.00		5.00
867	Rehabilitation of Road Peco Road to Marchazar Colony UC-117	Lahore	5.00		5.00
868	Restoration of Link Nadir Streets, Kocha Kandarvan	Lahore	1 12		1 12
869	Restoration of Link Nadir Streets, sonariyan Wali Gully, Haveli khair Din Chowk, Cheeri-Mara Streets. Kocha	Lahore	1.39		1.39
870	Construction of PCC and Drain in (Union Council Road), Jia Bagga Village, PP-160, Labore.	Lahore	4.45		4.45
871	Rehabilitation of Road Start from Telephone Exchange to Peeran Ditta Chowk in Jia Bagga Village. PP-160. Lahore.	Lahore	3.49		3.49
872	Rehabilitation of Road from Butcher Khana Distributory to Toor Village Road, PP-160, Lahore.	Lahore	1.91		1.91
873	Construction of PCC and Drain in Tibba Katcha Village PP-160,	Lahore	3.16		3.16

				Procurem	ent Status
Sr. No.	Package Name	District Name	Total Damage	Comp- leted	In Process
	Lahore.				
874	Rehabilitation / Construction of Road From Tej Garh to Marl Mari, Ganja Sindhu, NA-130, Lahore	Lahore	44.59		44.59
	Total Punjab District Roads		7,292.59	5,968.56	1,324.03

# List of Irrigation Schemes

No	Category	Zone	Name of Scheme
1	Emergent	D.G Khan	Restoring eroded slopes of Muzaffargarh Flood Bund RD 58-78
2	Emergent	D.G Khan	Closing and Strengthening breach site RD 148-149 Muzaffargarh Flood Bund
3	Emergent	D.G Khan	Closing and Strengthening breach site RD 157-158 Muzaffargarh Flood Bund
4	Emergent	D.G Khan	Protecting Muzaffargarh Flood Bund from RD 0+000 - 100+000
5	Emergent	D.G Khan	Closing & Strengthening relief cut between RD 26-27 Rangpur Canal
6	Emergent	D.G Khan	Restoring Right Bank of Rang Pur Canal RD 341+500 – 347+500
7	Emergent	D.G Khan	Restoring Right Bank of Muzaffargarh Branch RD 37+000 to 59+000
8	Emergent	D.G Khan	Closing & Strengthening Breaching Section RD 12-13 Doaba Flood Bund
9	Emergent	D.G Khan	Closing & Strengthening Breaching Section RD 13-14 Doaba Flood Bund
10	Emergent	D.G Khan	Closing & Strengthening Breaching Section RD 8-9 Rohari Flood Bund
11	Emergent	D.G Khan	Closing & Strengthening Breaching Section RD 14-15 Rohari Flood Bund
12	Emergent	D.G Khan	Installation of Missing / Chowked Liner and Protecting Bank of Rohari Flood Bund RD 0+000 to 23+400
13	Emergent	D.G Khan	Closing & Strengthening Relief Cut at J-Head Spur No.2 RD 2 - 3 Khangarh Flood Bund
14	Emergent	D.G Khan	Protecting Khangarh Flood Bund RD 0+000 - 35+000
15	Emergent	D.G Khan	Protecting Khangarh Flood Bund RD 35+000 - 45+000
16	Emergent	D.G Khan	Protecting Khangarh Flood Bund RD 45+000 - 99+000
17	Emergent	D.G Khan	Protecting Khangarh Flood Bund RD 99+000 - 141+000
18	Emergent	D.G Khan	Protecting Shehr Sultan Flood Bund RD 15+000 - 45+000
19	Emergent	D.G Khan	Protecting Shehr Sultan Flood Bund RD 46+000 - 97+000 and providing Mobile Gang
20	Emergent	D.G Khan	Protecting Chander Bhan Flood Bund RD 46+000 - 56+000 and Providing Mobile Gang
21	Emergent	D.G Khan	Protecting Chander Bhan Flood Bund RD 58+000 - 71+000
22	Emergent	D.G Khan	Protecting Chander Bhan Flood Bund RD 72+000 - 84+000
23	Emergent	D.G Khan	Protecting Langer wah flood bund RD 71+000 - 75+000
24	Emergent	D.G Khan	Protecting Langer wah flood bund RD 75+000 - 80+000
25	Emergent	D.G Khan	Strengthening Right Bank of Muzaffargarh Branch from Reach RD 61+700 to RD 62+250 to Protect M.Garh City
26	Emergent	D.G Khan	Closing & Strengthening breaching section at RD:20-21 Rohari Flood Bund
27	Emergent	D.G Khan	Protecting Khangarh Flood Bund RD 141+000 - 153+000 and Shehr Sultan Flood Bund RD: 0 - 15+000
28	Emergent	D.G Khan	Installation of Missing / Chowked Liner and Protecting Bank of Doaba Flood Bund RD 0+000 to 19+000
29	Emergent	D.G Khan	Protecting Muzaffargarh Flood Bund from RD 101+000 - 165+000
30	Emergent	D.G Khan	Protecting Muzaffargarh Flood Bund from RD 165+000 - 188+000 and providing mobile
31	Emergent	D.G Khan	Closing inlet at Muzaffargarh Flood Bund during flood 2014 in Ganesh Section of Khangarh Canal Sub Division.
32	Emergent	D.G Khan	Protecting T.P Link Canal against back water flow of River Chenab RD 183 - 191
33	Emergent	D.G Khan	Closing Culverts of N-70 By Pass Road for Flood Water Management to protect M.Garh city from the aggressive action of river water
34	Emergent	Lahore	Restoration measures against cut at R.D 49+524/L main Line Upper UCC.
35	Emergent	Lahore	Protective measure to save Shahdara Disty Flood Bund near village Dindian.
36	Emergent	Lahore	Closing & Stg: mishap site at RD 33+500 – 34+800 & RD 55+800 & 57+500 of Dhollan Minor.
37	Emergent	Lahore	Restoration of flood damages RD 7-11 New Gujran Minor.
38	Emergent	Labore	Closing & Stg: Relief Cut made by the local inhabitants during Flood 2014 RD 80-
50	Linergent	Lanore	81/L&R & RD 82-83/L&R Muridke Disty.
39	Emergent	Lahore	Closing & Stg: mishap site at RD 99-100/L Kala Shah Kaku Disty due to excessive flood water in the channel
40	Emergent	Lahore	Closing and strengthening for 20 No. cuts along BRBD Link Canal occurred
41	Emergent	Lahore	Closing and strengthening for 15 No. cuts along M.R Link Canal occurred
42	Emergent	Lahore	Protective measure against closing of Rain Cut /Ghars in between Reach RD.37+600 to 51+180 on Madodas Bund
43	Emergent	Lahore	Protective measures against erosion of right bund of Deg Diversion Channel in between Reach RD.80-81/R
44	Emergent	Bahawalpur	Erosive action of Sutlej River along Basti Akuka (District: Bahawalnagar)

No	Category	Zone	Name of Scheme	
45	Emergent	Multan	Restoration of Haveli Main Line RD 13-14, damaged	
46	Emergent	Multan	Closing of cut at breaching section (R.M.B), activated during flood 2014, as per SOP for the safety of Barrage and its allied structures.	
47	Emergent	Multan	Closing breaches / relief cuts on Rangpur Canal occurred breaching section of Trimmu Barrage due to spill / backwater of River Chenab and activation	
48	Emergent	Multan	Closing breaches / relief cuts on damaged portion of 1-AL, 1-L, 2-L, 1-R, 2-R, 4-L, 2-R/3-L, channel occurred due to spill / backwater of River Chenab and activation of breaching section of Trimmu Barrage	
49	Emergent	Multan	Emergent protection, raising and widening of defence / protection bunds of Dab Kalan Town.	
50	Emergent	Faisalabad	Relief Cut RD. 82-83/L of Q. B. Link Canal	
51	Emergent	Faisalabad	Relief Cut RD. 89+700 – 89+950/R of Q. B. Link Canal	
52	Emergent	Faisalabad	Relief Cut RD. 90+000 – 90+200/R of Q. B. Link Canal	
53	Emergent	Faisalabad	Relief Cut RD. 149 - 150/R of Q. B. Link Canal	
54	Emergent	Faisalabad	Relief Cut RD. 200 - 201/R of Q. B. Link Canal	
55	Emergent	Faisalabad	Closing Rain Cut RD 320-321/L of Q.B.Link Canal due to heavy rain	
56	Emergent	Faisalabad	Closing Rain Cut RD 302-303/L of Q.B.Link Canal due to heavy rain	
57	Emergent	Faisalabad	Closing Rain Cut RD 318+915/L of Q.B.Link Canal due to heavy rain	
58	Emergent	Faisalabad	Closing Rain Cut RD 326-327/L of Q.B.Link Canal due to heavy rain	
59	Emergent	Faisalabad	Closing Rain Cut RD 350-351/L of Q.B.Link Canal due to heavy rain	
60	Emergent	Faisalabad	Restoration of Breaching Section between RD; 3+000 – 4+000 Right Marginal Bund of Khanki Headworks	
61	Emergent	Faisalabad	Restoration of Breaches in Lower Chenab Canal at RD; 38-39/R, 39-40/R and 40-41/R	
62	Emergent	Faisalabad	Restoration of relief cut at RD;133-134/L of Lower Chenab Canal	
63	Emergent	Faisalabad	Restoration of cut at RD; 94-95/L of Lower Chenab Canal	
64	Emergent	Faisalabad	Restoration of damaged inlet in between RD; 2-3/L of Lower Chenab Canal	
65	Emergent	Faisalabad	Closing & Strengthening Relief cut at RD: 2+000-3+000/L U.G Branch.	
66	Emergent	Faisalabad	Closing & Strengthening Relief cut at RD:8+000-9+000/L U.G. Branch	
67	Emergent	Faisalabad	Closing & Strengthening Relief cut at RD: 52+000-53+000/L U.G. Branch	
68	Emergent	Faisalabad	Closing & Strengthening Relief cut at RD: 62+000-63+000/L U.G. Branch	
69	Emergent	Faisalabad	Closing & Strengthening Relief cut at RD. 113+500/L&R U.G. Branch	
70	Emergent	Faisalabad	Checking of side erosion and strengthening of bank between RD:108000+110+000/L&R U/S+D/S Bridge RD:109+501	
71	Emergent	Faisalabad	Closing breaches between RD. 58-59 of Pindi Bhattian Flood Protection Bunds	
72	Emergent	Faisalabad	Closing breaches between RD. 67-68 of Pindi Bhattian Flood Protection Bunds	
73	Emergent	Faisalabad	Closing breaches between RD. 53-54 & 56-57 of Pindi Bhattian Flood Protection Bunds	
74	Emergent	Faisalabad	Closing breaches between RD. 55-56 of Pindi Bhattian Flood Protection Bunds	
75	Emergent	Faisalabad	Closing breaches between RD. 48-850, 54+172, 54+300,54+380, and 54+500 of Pindi Bhattian Flood Protection Bunds	
76	Emergent	Faisalabad	Closing Relief Cut RD 40-41/L of Q. B. Link Canal due to heavy rainfalls	
77	Emergent	Faisalabad	Closing 2 No. newly developed creeks on left side D/S Qadirabad Barrage due to spill of flood Short Term Measures)	
78	Emergent	Faisalabad	Restoration of banks of Chakbandi Main Drain from RD.2+000 - 18+000.	
79	Emergent	Faisalabad	Closing of Breach and Restoration of affected portion of Jhang Flood Protection Bund at RD.1+000 – 2+000.	
80	Critical	D.G Khan	Restoring apron of J-Head Spur RD 125+500 Khangarh Flood Bund Damaged	
81	Critical	D.G Khan	Restoring of J-Head Spur No. 2 RD 15000 Khangarh Flood Bund	
82	Critical	D.G Khan	Restoring of J-Head Spur No. 3 of Khangarh Flood Bund	
83	Critical	Sargodha	Restoration of J-Head Spur No.2 near village Pandi	
84	Critical	Sargodha	Restoration of J-Head Spur No.3 near village Kot Patwan	
85	Critical	Sargodha	Restoration of J-Head Spur No.4 near village Kolowal / Dera Nasir	
86	Critical	Lahore	Closing Breach of mardana drain RD 29+000 to 30+500	
87	Critical	Lahore	Closing / strengthening breaches along nikki deg drain reach RD 33+400 - 60+000 and RD 152+000 - 226+000	
88	Critical	Lahore	Desilting of nikki deg drain RD 97+500 - 136+000	
89	Critical	Lahore	Repairing rain cuts on mangoki drain RD 72+000, 74+200, 112+000, 114+000, 140+115 and 140+145	
90	Critical	Lahore	Repairing outfall structure sangowali drain and closing breaches	

No	Category	Zone	Name of Scheme
91	Critical	Lahore	Repairing flood damages along deg nullah RD 0+000 to 91+400
92	Critical	Lahore	Repairing flood damages on flood embankment along aik nullah RD 0+500 - 12+500
93	Critical	Lahore	Repairing flood damages along lurriki drain
94	Critical	Lahore	Closing breaches left bund of Nullah Deg from Chahore bridge to Jesty wala.
05	Critical	Labore	Construction of cunnette and ganda band in River Ravi to save Shahdara Distributory
90	Chilicai	Lanore	near Dandian Village (Babbakwal)
96	Critical	Bahawalpur	Severe river attack of Sutlej River near Village Ratteka
97	Critical	Bahawalpur	Severe river attack of Sutlej River near Village Akuka
98	Critical	Bahawalpur	Erosive action of Indus River between RD:196-197 Minchin Flood Bund (Smoka Village)
99	Critical	Multan	Restoring critical reaches of Chenab flood bund (RD 0 - 10, 90 - 91 and 100 - 140
100	Critical	Multan	Repairing right bank of lower muzaffraabad disty
101	Critical	Multan	Restoration / remodeling protection / defence flood bund along with its stone stud near dab kalan town
102	Critical	Multan	Restoration of Rangpur flood bund and its allied structure damaged during flood 2014
103	Critical	Multan	Restoration of downstream stone pitching of escape cum bridge RD 193-194 of haveli main line damaged during flood 2014
104	Critical	Multan	Restoration of damaged lining of haveli main line RD 13-14 / R
105	Critical	Faisalabad	Restoration of choking bund D/S Qadirabad Barrage damaged during flood 2014
129	Inescapable	Sarqodha	Protection of Jhelum City from the floods of River Jhelum
130	Inescapable	D.G Khan	Raising and Strengthening Doaba Flood Bund RD:0+000 to RD:19+500
131	Inescapable	D.G Khan	Restoration of J-Head Spur RD:47+500 Shah Wala Groyne damaged during flood 2014
132	Inescapable	D.G Khan	Restoration of Pitching and Apron of Ganda Jakhar Imam Shah
133	Inescapable	Lahore	Rehabilitation of Maddudas Flood Bund
134	Inescapable	Lahore	Restoration of Deg Diversion Channel Bund
135	Inescapable	Sargodha	Restoration of Guide Wall Spur No.8 near village Shahbazpur on right bank of Chenab
136	Inescapable	Sargodha	Restoration of Eroded Bank between RD.3-4, 7-8, 11-12 and 21-22 and closing cuts between RD.23-24 of Farrukhpur Flood Bund
137	Inescapable	Sargodha	Remodeling of LBN Flood Bund from RD.0+000 to 20+531
138	Inescapable	Multan	Constructing Cunnette at Sher Shah Bridge of River Chenab
139	Inescapable	Multan	Constructing Cunnette in River Bela upstream of Trimmu Barrage
140	Inescapable	Faisalabad	Extension of Jhang flood protection bund from RD 64+000 to 71+000 to tie up with railway line (to save Jhang city & adjoining abadies). (Jhang canal division)
141	Inescapable	D.G Khan	Remodeling of Muzaffargarh Flood Bund RD.0-188
142	Inescapable	D.G Khan	Remodeling of Khangarh Flood Bund RD.0-30 to protect Muzaffargarh City
143	Inescapable	D.G Khan	Remodeling of LMB of Taunsa Barrage
144	Inescapable	Lahore	Providing protective measures against flood in Deg Nullah U/S Kingra Road Bridge.
145	Inescapable	Lahore	Remodeling LMB of Marala Barrage.
146	Inescapable	Sargodha	Remodeling of Masson Flood Bund
147	Inescapable	Multan	Remodeling of Right Embankment of Shujabad Branch from RD: 231580 – 279000
148	Inescapable	Multan	Remodeling of Akbar & Nawabpur Flood Bund.
149	Inescapable	Multan	Remodeling of Sher Shah Railway Flood Bund RD. 0-15000
150	Inescapable	Multan	Remodeling of LMB of Trimmu Barrage
151	Inescapable	Faisalabad	Remodeling of reaches of Jhang flood protection bund and Thattha Mahla Bund
152	Inescapable	Faisalabad	Remodeling of left marginal bund of Qadirabad barrage in critical reaches.

## ANALYSIS AND SCOPE OF DRM COMPONENT

#### I. Background

1. Historically with major gaps between disasters and memories short-lived, the country did not develop any permanent capacity to effectively respond and pro-actively improve its resilience to disasters. With increased frequency of recurrence of disaster in the last 15 years, the 2005 earthquake was a watershed for the country in the context of DRM. Earthquake Reconstruction and Rehabilitation Authority (ERRA) was established immediately after the earthquake through a special ordnance to coordinate, plan, monitor and oversee the reconstruction work. This was followed by promulgation of the National Disaster Risk Management Framework and establishment of National (NDMA) and Provincial Disaster Management (NDM). In 2010 National Disaster Management (NDM) Act was passed by the parliament.

The National Disaster Risk Reduction Policy and the National Disaster Management Plan was approved for Pakistan in 2013. The plan includes a human resource management plan; multi-hazard early warning system; and guidelines for community-based DRM, and is currently under implementation albeit at very slow pace.

A national "Hazard and Risk Assessment" was carried out in 2011, which serves as a 2. key baseline document for disaster risk sensitive development planning at the national, provincial and local levels. Specialized training courses were organized on flood, drought, coastal hazards and earthquake risk reduction, DRM mainstreaming, and disaster risk communication. In addition DRM was integrated into the curriculum of mainstream universities, the national disaster management institute and special purpose units were established in a few universities to undertake further research and development on challenges related to disasters. During the last three years, National Disaster Response Plan, five Provincial Disaster Response Plans have been prepared, five micro level vulnerability assessments and 30 district disaster management plans (DMP) have been developed. In addition multi-hazard vulnerability and risk assessment are currently being carried out in 5 additional districts and some selected cities. Disease Early Warning System (DEWS) have been established in 48 districts and 3 tide gauges installed for Tsunami Early Warning System. Glacial stations have been stationed in two major valleys in the north of the country to monitor glacial melt and glacial mass. Similarly the weather radars are being installed in Islamabad and Karachi to improve forecasting and early warning capacity. A large number of cities in Pakistan now have well established rescue services (rescue 1122).

3. Role of Donors: There has been very strong donor coordination throughout the major emergencies both during the relief and the reconstruction phase. Currently a DRM donor forum is actively coordinating all flood and emergency related activities, mapping activities of all major donors and non-government organizations and actively engaging with the government and NDMA on policy and strategic issues. As far as major donors are concerned, the current focus of the WB support is on risk assessment in urban area, capacity and institutional building of disaster risk management agencies, developing disaster risk financing instruments, and strengthening urban response capacities on a pilot scale. The overall resource allocation for these activities is around \$10 million. The World Bank is actively engaged with DFID on developing a \$15 to \$50 million DRM program for the next 5 years. The Japanese International Cooperation Agency (JICA) is also actively supporting the NDMA and PMD in developing a roadmap for disaster risk management activities, building their disaster response capacity, hazard risk planning and mapping of vulnerable areas and providing equipment radars and telemetry for improving early warning capacities. The USAID is currently preparing a community based DRM program that will be implemented by non-government organizations. The UN is the other major player with funding of about \$9 million focusing on improving response capacities, building emergency storages, training, strengthening disaster risk assessments and disease surveillance systems, mainstreaming DRR in the development agenda and community-based DRM capacity building. The Australian Aid and EC are the other bilateral donors actively engaged in supporting the DRM agenda in Pakistan.

Decentralized Disaster Risk Management: Under the eighteenth amendment of the 4. constitution enacted in 2011, the DRM and Climate Change (CC)functions have been devolved to the provinces. Although implementation of National DRMP is predominantly in the provincial domain, very little work has been done to translate this into provincial disaster management plans. None of the provinces has a DRM policy and any resource allocated to PDMAs has remained focused on response rather than preparedness, mitigation and adoption. The disaster management authorities established at provincial, regional and district levels of the governments have large variations in their capacity and performance. The institutional mechanism both at provincial and regional levels to mainstream DRM, and to coordinate, monitor and report on DRM plan activities is weak and is in early stage of development. The mandate for climate change adaptation and mitigation is with the climate change ministry at the federal level. The national climate change policy with an action plan was approved in 2012. The mandate for implementation at the provincial level is with the respective environmental ministries. The Climate Change Policy Implementation Committees headed by the federal minster has been established and adopted the framework for implementation of National Climate Change Policy. However this framework still has to be adopted by the provinces, which have weak capacities and lack the institutional mechanism to implement the policy and coordinate effectively with the work being undertaken under DRMP.

5. **DRM and CC in Punjab:** The Government of Punjab's (GoPb) short-term strategy outlined in its Draft Report on Assessment of Damage and Reconstruction Costs that was prepared in response to the 2014 floods entails enhanced coordination mechanisms among disaster response agencies. It also includes recommendations for restoring and upgrading prioritized flood protection works, the implementation of key recommendation for physical as well as fiscal response and ensuring resilience of the reconstructed infrastructure, including analytic work to guide the response. These recommendations also encompass activities such as flood plain mapping, and development and implementation of plans for enhanced flood management. In the medium to long term the strategies include strengthening of institutions to ensure disaster risk reduction, developing policy framework and implementing interventions for addressing flood plain risks. The strategy also recognizes the need for mainstreamed DRM into development planning and measures for monitoring and reporting on DRM. On the other hand the GoPb has still not established any dedicated capacity for handing climate change. The provincial EPA that currently handles the subject has limited interest and has made no effort in developing its capacity or work on developing any framework, policy or plan for climate change in the province.

6. Some of the broad priority activities identified by the PDMA in the provincial disaster management plan include: i) PDMA and DDMA Strengthening; ii) Multi-hazard risk assessment capacity development; iii) Scaling up community based disaster risk management (CBDRM); iv) Development of the Disaster Risk Management policies, legislation, plan, disaster risk financing instruments and mainstreaming DRM; and v) Strengthening early warning and forecasting.

7. The PDMA has limited capacity to undertake these activities. To respond to this institutional capacity assessment of PDMA was recently completed and a restructuring plan has been approved and is being implemented to address immediate capacity gaps. Recruitment is currently underway under the restructuring plan. The PDMA had started socio

economic risk mapping of the areas along the major river corridors with support of the UN and Urban Unit however this exercise was stopped due to lack of funding with reasonable amount of work done in 5 districts. The base model capturing and analyzing this data has been developed by the PDMA with the assistance of the Urban Unit is currently being tested. The word bank is also working the PDMA and GoPb in assisting them to establish a disaster risk management fund and different financing instrument for disaster risk financing. In addition they are in consultation with PDMA for supporting additional activities in Punjab for strengthening early warning system and scaling-up CBDRM.

The GoPb through the PID reviewed all previous works done on improving flood 8. management and resilience. The team has provided its analysis and proposals on the 2014 flood to PID. A special committee constituted by the CM for 2014 floods, has reviewed this generic analysis and other reports generated on the subject and has provided its specific recommendation on enhancing flood resilience, preparedness, early warning systems and mainstreaming disaster resilience in the development planning process. In response PID is currently mapping 10 to 15 kilometers reaches on either side of all the five major rivers in Punjab. It has already obtained satellite imagery for the flood plans and is working closely with Space and Upper Atmosphere ResearchCommission (SUPARCO) in flood forecast and simulation modeling for these reaches in their flood warning cell. The PID is also working in parallel to improve its technical capacity for computer added modeling and design and acquiring latest soft-wares and establishing a dedicated numerical modeling cell for this purpose. In addition to this GoPb recently approved the establishment of irrigation safety evaluation authority, whose main role will be to improve the procedures for periodic inspection of all critical flood (embankments and dikes) and irrigations (head-works and dams) infrastructure using latest state of the art technologies, propose mitigation measures and monitor and report health and status of routine and periodic maintenance of the infrastructure inventory. This will allow better and timely maintenance of these structure, and mitigate to a larges extend the flood impact caused by breaches. The PID is also developing an IT based decision support system with support of the WB that will integrate the information generated at different level. To ensure better flow and integration of information the PID has recently moves summery to integrate all these cells into a single unit called the Risk Management Unit (RMU). In addition to this the cabinet committee of GoPb has also approved the riverine settlement act which will now be put the provincial parliament for approval. PID will be implementing agency of act, for which it intends to start framing the rules and putting the institutional structure in place for implementation. PID hiring consultants from its own resources to take this work forward in 2015, setting the direction for managing settlements and development in the flood plains.

9. DRM and CC in the district along Poonch River (Haveli, Poonch and Kotli): The regional government fully recognizes that poor land management and planning and weak resource management and prioritization are among the major reasons for increased disaster impacts. They are now making serious efforts to establish a robust baseline for disaster management in the districts. In this context the recent initiatives to develop land use management act, and the continued improvement in land use mapping and planning, and related strengthening of GIS interface including digitization, geo-referencing and inventory of all critical assets is commendable. However the mapping exercise is still incomplete, the inventory does not cover the disaster risk mapping information and land use planning legislation still needs improvements to further mainstream disaster risk management and there is an urgent need for developing capacities and systems for coordination, oversight and monitoring of the DRM and land use agenda. The government for Haveli, Kotli and Poonch districts has much stronger ownership, but limited resources to mainstream the climate change agenda into its development planning process. They fully recognize that climate change is affecting weather pattern, glacial melt, and the frequency and intensity of floods, that in-turn is threatening life, infrastructure, biodiversity, and natural habitat of the region. The climate change priorities of the region support both long-term and short-term climate change adaptation and mitigation activities to enhance resilience and sustainability of all productive and green sectors. The government is currently in the process of restructuring the P&D to establish a modestly resourced climate change unit with dedicated staff.

10. The three districts are working closely with the World Bank (WB) to undertake multihazard vulnerability and risk assessments, the activities are expected to start from Muzaffarabad, Poonch and Bagh districts in the region. These would include digital hazard mapping and soil investigation. Under this component the WB will also develop the DRM, rescue and response capacities, establish district response units and central command and control centers, establish a data and information management system, undertake awareness campaigns, and develop DRM plans at the district level. The WB will also undertake physical interventions for flood protection focus on energy sector infrastructure, urban centers, and communities and their critical infrastructure.

# II. Project DRM Component

The output will be strengthened disaster risk management.

11. The DRM component of the project aims at improving disaster resilience through mitigation, adaptation and preparedness. Focus of the DRM funding in Pakistan has been on the post disaster management and more recently on improving early warning system albeit in the absence of accurate data. The main gaps in overall flood or disaster management in general including the early warning system and to large extend in the response to disaster are directly related to the limited baseline data, inventory, mapping, related models and tools to analyze the risks and absence of accurate information and tools to use this information effectively during disaster. The starting point for DRM is to understand disaster risk and vulnerabilities, than translating them into mitigation and adoption plans at all level. This requires undertaking the of risk and vulnerability assessments, mainstreaming the outcomes into the development planning process, resource allocation and capacity development for their implementation.

12. The key outputs of the DRM component of the project apart from reconstructing structures damaged by 2014 flood to multi-hazard resistant standard will be :i) identification of critical risks and vulnerabilities in most vulnerable districts and related mitigation and adaptation measure; ii) mainstreaming DRM and Climate Change adaptation and mitigation through human and institutional capacity development and strengthening the DRM, climate change and planning interface; and iii) increase resilience to climate change and disaster through piloting priority mitigation and adaptation measures.

## A. DRM Component in Punjab

13. There will be two subcomponents of DRM component that will be supported by the project in Punjab. Activities under "subcomponent 1" that will be implemented by the PDMA and P&D include: i) support for undertaking a multi-hazard vulnerability and risk assessment (MHVRA) in 16 most vulnerable districts of Punjab; ii) establishing data management and control centers at the PDMA, 16 districts offices and P&DD (data clearing house) and provide the necessary technical hardware, equipment and furniture; and iii) develop capacities at the provincial and district level to management MHVRA outputs and data, translate them in planning tools. P&D will be the spatial data clearing house and work as a "one stop" access to all registered geographical information. It will provide online access services of spatial data within the Punjab province. The data of different organization like Irrigation, PDMA and Urban Unit will shared between them through this interface, with each

department having their own database and control over the movement of their data. The P&D will have information of its registered department in the form of metadata and catalogues to provide a convenient way to find access and share geospatial data. The estimated cost of this subcomponent is \$7.05 million and the cost breakup of each activity is provided at page26 of PAM.

14. Activities under "subcomponent 2" that will be implemented by the PID include: i) support for developing standard operational procedures for inspection regime, reporting and monitoring of inspections, and identification of cutting edge safety equipment required for inspections; ii) providing safety equipment and training in its usage; iii ) develop DRM and Flood Risk Management training modules and training staff of Engineering Academy; and iv) support of integration of the PID data in the risk management unit and link with data clearing house in the P&D. The estimated cost of this subcomponent is \$1.45 million and detailed cost breakup is provided at page 26 of PAM.

# B. DRM Component in Haveli, Poonch and Kotli Districts

15. There will also be two subcomponents of DRM component that will be supported by the project in these three districts. Activities under "subcomponent 3" that will be implemented by the P&DD include: i) establishing a central climate change unit ; ii) Developing a climate change adaptation and mitigation plan and devise a strategy for its implementation; iii) Enhance climate change awareness through media, trainings and capacity building. Activities under "subcomponent 4" will be implemented by the Appex Department of Forestry Wildlife and Fisheries include: i) support for piloting priority mitigation and adaptation measures in land slide protection through biological intervention along major corridors; and ii) introduction of latest landslide stabilization technologies. The estimated cost of the DRM subcomponents in support of three districts of Haveli, Poonch and Kotli is \$7.03 millionand detailed cost breakup is provided at page 27 of PAM.

## PROJECT PROCUREMENT RISK ASSESSMENT REPORT

#### EXECUTIVE SUMMARY

1. The overall assessment of project procurement risk is Low. Planning and Development Department (P&DD), Punjab is the executing agency. Punjab Irrigation Department (PID), Communication & Works (C&W) Department, and Punjab Disaster Management Agency (PDMA) are the implementing agencies (IAs) of this project.

2. PID is already implementing various donor-funded projects in the province. There is one Project Management Unit (PMU) and one Project Management Office (PMO). There is enough capacity within the department at the field level (engineers and technical experts) to undertake procurement activities according to Punjab Procurement Rules (PbPR). However, the capacity at the field level to apply ADB procurement guidelines is somewhat deficient. The PID field formations have initiated and completed emergency works under extreme urgency (to be considered for retroactive financing) and regular procurement of sub-projects as advance contracting through open competitive bidding under PbPR 2014. The procurement risk is low.

3. C&W department has separate field formations to look after the flood damages of provincial highways and a separate set up for district roads. The field formations in both set ups have qualified engineers; have already completed the emergency works under extreme urgency (to be considered for retroactive financing) and procurement process of remaining sub-projects as advance contracting through open competitive bidding under PbPR 2014. The C&W department has not implemented any ADB funded project in the recent past. There is enough capacity within the department at the field level (engineers and technical experts) to undertake procurement activities according to PbPR 2014. The procurement risk is low.

4. PDMA is a provincial chapter of National Disaster Management Agency (NDMA). It is mandated to quickly respond to and manage disasters on urgent basis in the province. It would be apposite to argue that the IA is not familiar with the procurement of works, goods and consulting services using country or donors systems both at the departmental level as these activities are not taking place at that level. The procurement risk is high.

5. Following mitigation measures may be adopted to mitigate and manage the risks highlighted above:

6. Risks require specific mitigation / management actions. These actions among others would include:

- Up-front hiring of dedicated procurement capacity in the PIUs to be established in each IA which will be responsible for the preparation of procurement documents for procurement of goods, consulting firms, and civil works where needed;
- Increased oversight by the project division(s), including prior review of all contracts for goods, civil works and services before award;
- Keep close liaison with the PIUs when established; provide continuous capacity building support from resident mission to the EA/IAs during the procurement process;
- Coordinate with PPRA and arrange a series of training programs for the procurement practitioners at field level;
- ADB to hold procurement clinics for IAs to provide hands-on trouble shooting.

# I. INTRODUCTION

7. The assessment was prepared in accordance with the Guidelines for Assessing Country, Sector and Project Procurement Risks. The project procurement risk assessment was undertaken from 8-10 April 2015. The EA has not implemented any project funded by ADB in the last 5 years. However, one IA (PID) has been executing donor-funded projects. Preparation activities included reviewing procurement documents, and interviews and discussions with counterparts in the PID, C&W Department and PDMA.

# II. PROJECT PROCUREMENT RISK ASSESSMENT

# A. Overview

8. The risk ratings of individual elements of the executing agency (EA) are assessed as Low except procurement of goods, works and consulting services under ADB procurement guidelines by PDMA which is assessed as High. The PID is familiar with use of ADB procurement guidelines. The C&W department has already completed procurement of civil works as advance contracting under PbPR 2014. The PID and C&W staff at field level has demonstrated command over applying the PbPR 2014 for procurement of civil works. The hiring of third party validation consultants was undertaken at the EA level.

9. Organizational and staff capacity and processes for information management, procurement practices, effectiveness and accountability measures are generally satisfactory for the procurements that are taking place within the departments except PDMA. The minor deficiencies which do not pose any major procurement risk can be addressed by placing additional staff and facilities wherever procurement takes place under ADB funded projects.

# Organization and Staff Capacity

## Risk Assessment:

10. Overall risk rating for the organizational and staff capacity is assessed as Low.

The PID and C&W have very well defined administrative hierarchy with financial powers delegated to the authorities at the field level. The executive engineer (XEN) is the focal person who initiates procurement process based on estimated rates prepared by subdivisional officer (SDO). There is a tender opening committee notified by the competent authority. The PID has established project management office (PMO) for Barrages in 2004, and later on, a PMU. Since then, PID has acquired a good skill in procurement through special and hands-on trainings on five on-going/complete Barrages projects. Although procurement unit exists and required skill is available, but number of staff are far less than the workload. Additional dedicated staff will be needed for the proposed project. The physical resources are however satisfactory for project implementation.

The C&W department is already likely to complete all procurement of civil works needed for reconstruction of provincial and district roads through field formations. Additional staff/expertise will be required for PDMA to procure goods under ADB procurement guidelines.

11. PbPRA has the capacity to tailor specialized procurement training program in the EA that may enhance the effectiveness and efficiency in delivery of outputs. The EA has access to training programs delivered by PbPRA. The IAs under the EA are following a decentralized model of procurement process. The IAs are autonomous in procurement process and current procedures do not require any approval outside the IAs.

#### Information Management

#### Risk Assessment:

12. Overall risk rating for the information management is assessed as Low. All the IAs including the EA are required to maintain the complete details including evaluation reports, original bids, contract and correspondence of the procurement process either awarded or annulled for five years. The EA/IAs keeps record for 10 years as old institutional practice and managing it in the same spirit. In addition, the EA/IAs has maintained referencing system which provides unique identification number of each procurement activity. When feasible, the IT is used for keeping track of procurement record. It is however felt that with the increase in work load; the IAs will be requiring designated human resource for document control and information management.

## **Procurement Practices**

#### Procurement of Goods and Works Risk Assessment:

13. Overall risk rating for the "Procurement of Goods and Works" is assessed as Low. The District Support and Monitoring (DSM) Directorate of C&W is likely to complete reconstruction/rehabilitation of 874 schemes under PbPR 2014. The value of contracts is ranging from PKR 50,000 (\$500) to more than PKR 100 million (>\$1 million). The field formations across the province have procured under extreme urgency and executed the contracts. Similarly, PID has also procured and completed the emergent and critical works contracts under extreme urgency. Both PID and C&W has a system of enlisting the contractors on annual basis. The estimates are prepared in accordance with market rate system (MRS) notified by the provincial finance department. PDMA will have to procure certain goods under ADB procurement guidelines for disaster risk management. There is no in-house capacity to accomplish the task. Upfront engagement of procurement specialists would be needed.

S#	Activity	C&W	PID	Remarks
1	Approval/ Technical Sanction	Yes	Yes	Different authority accords approval; a different authority initiates procurement and a different authority makes payments.
1	Advertisement	Yes	Yes	In more than two newspapers including one English
2	Open or limited bidding	Limited bidding	Limited bidding	Only enlisted contractors under various categories are invited to submit bid. Enlistment is done on payment of fee and in accordance with technical qualification criteria (PEC) during July every year.
3	Tender fee	Yes	Yes	Nominal fee is paid through CDR or Pay Order.
4	Response time	Min 15 days	Min 15 days	Usually more than 15 days
5	Bid security (Earnest Money)	2% of the estimate (fixed)	2% of the estimate (fixed)	In the form of CDR or Pay Order
6	Bidding Document	Yes	Yes	Bids are usually submitted as percentage or item rate basis
7	Bid Opening	Opened on the last	Opened on the last	1S1E procedure is used. On the same day evaluation sheet is

S#	Activity	C&W	PID	Remarks
		date of submission of bids	date of submission of bids	prepared.
8	Evaluation	Since the competition is amongst already enlisted contractors, price is the only criteria	Since the competition is amongst already enlisted contractors, price is the only criteria	On papers, the enlistment exercise seem quite robust, however, there is no mechanism in place on reporting the poor performance of the contractors.
9	Negotiations	Prohibited	Prohibited	Contractors offer discounts on voluntarily basis on the date of opening of bids.
10	Contract Form	Available	Available	Largely in favor the department. The XEN himself becomes the engineer- in-charge. The contractor in no way can go against the department. However, the institutional arrangements are such that there have been very rare cases of contractor going against the department largely due to perception of losing the future business.

## **Consulting Services**

#### Risk Assessment:

14. Overall risk rating for the "Consulting Services" is assessed as Moderate.

15. Generally, there is no requirement of hiring the consulting services for any assignment in the EA except for hiring individual consultants. The EA is not mandated to procure consulting services even if there is a need for that. NESPAK is usually engaged directly for providing variety of services. In order to monitor progress of flood rehabilitation works third party validators have been engaged. The IAs staff is convinced that since a PIU is usually established to manage the donor funded project and the donor's procurement guidelines are followed, therefore, the procurement specialists hired by the PIU should take care of hiring of consulting services.

## Effectiveness

Risk Assessment:

16. Overall risk rating for "Effectiveness" is assessed as Low.

17. The engineer-in-charge and his team monitor the execution of works. The payments to the contractors are made as per guidance laid down in the contract document. There is a three member committee in place in the EA headed by the Chief Engineer or Superintending Engineer. The Committee is obliged to decide the complaint with 15 days of receipt of complaint. However, mere lodging of complaint does not stop the procurement process. It would deem more appropriate if one member is taken from outside the EA/IA for an impartial review of the complaint. The head of committee is also head of a circle jurisdiction or divisional jurisdiction representing the department. Hence, there is an element of potential conflict of interest.

## Accountability Measures

Risk Assessment:

18. Overall risk rating for "Accountability Measures" is assessed as Moderate.

19. To ensure transparency and business ethics, an integrity pact is signed by the Supplier/Contractor/Consultants for all procurements above PKR 10 million. It is, however, pertinent to note that detail provisions on conflict of interest leading to in-eligibility do not exist in PbPR 2014. Though a paragraph is added on conflict of interest in PPRA regulations for consulting services but detailed provisions as in case of ADB's guidelines are not found. The EA's accountability mechanism in place is simple and governed by Punjab Government Code of Conduct. The provincial Accountant General office is altogether an independent office for making payment in accordance with Financial Rules of provincial government. In general the accountability mechanism is satisfactory and also simple so it would not impede the progress of projects.

## B. Strengths

20. The existing institutional arrangements of field formations in both PID and C&W departments provide reasonable comfort regarding execution of small civil works across the province. Both IAs have full capacity to undertake procurement of goods and civil works in accordance with PbPR, 2014. In addition, the EA/IAs has adequate record keeping infrastructure and robust document retention policy. The EA/IAs has adequate ethics and anticorruption measures in place.

## C. Weaknesses

21. Currently, there is no capacity to procure consulting services under ADB procurement guidelines. The filed formations, if required to use ADB bidding documents for small works, will have to build up capacity through capacity building programs. The capacity is scattered across the province. The staff is trained for rules-led procurement activity under PbPR, 2014.

## III. CONCLUSION

22. The overall assessment of project procurement risk is Low. The two IAs under P&DD, Punjab has enough procurement capacity to undertake procurement of contracts through their respective filed formations. PID has already executed 79 emergent works amounting PKR 272 million under extreme urgency. The department is involved in advance contracting of remaining critical works. The C&W district road component has also executed 737 contracts including works under extreme urgency; the remaining 137 schemes are under advance contracting. The provincial roads component has also executed 16 provincial roads; remaining 6 contracts are under advance contracting. The engagement of a Project Management Consulting firm using ADB procurement guidelines is a challenge.

23. PDMA is not familiar with the procurement of works, goods and consulting services using country or donors systems at the departmental level as these activities are not taking place at that level. The procurement risk is high which would be mitigated through engagement of procurement expertise from the market combined with increased oversight by the ADB resident mission staff.

# Procurement Risk Assessment and Management Plan (P-RAMP)

24. Following mitigation measures are considered satisfactory and expected to work effectively.

Risk Description	Risk Assessment	Mitigation Measure
		High risk requires specific mitigation / management actions including but not limited to:
The PDMA is unfamiliar with the ADB procurement guidelines for procurement of goods, works and consulting services;	High	procurement capacity in the PIUs to be established in each IA which will be responsible for the preparation of procurement documents for
The C&W and PID are lacking capacity to undertake procurement of consulting services under ADB procurement guidelines;	Moderate	procurement of goods, consulting firms, and civil works where needed; - Increased oversight by the project division(s), including prior review of all contracts for goods, civil works and services before award; - Keep close liaison with the PIUs when established; provide continuous capacity building support from resident mission to the EA/IAs during the procurement process; - Coordinate with PbPRA and arrange a series of training programs for the procurement practitioners at field level; - ADB to hold procurement clinics for IAs to provide hands-on trouble shooting.

# E. National Competitive Bidding

## General

25. The procedures to be followed for national competitive bidding shall be those set forth in the Punjab Procurement Rules 2014 [No. ADMN (PPRA)10-2/2013] issued on the 13<sup>th</sup> Jan 2014 under the Public Procurement Regulatory Authority Act 2009 (VIII of 2009) with the clarifications and modifications described in the following paragraphs required for compliance with the provisions of the ADB Procurement Guidelines.

# Registration

- (i) Bidding shall not be restricted to pre-registered firms and such registration shall not be a condition for participation in the bidding process.
- (ii) Where registration is required prior to award of contract, bidders: (i) shall be allowed a reasonable time to complete the registration process; and (ii) shall not be denied registration for reasons unrelated to their capability and resources to successfully perform the contract, which shall be verified through post-qualification.

## Prequalification

26. Normally, post-qualification shall be used unless prequalification is explicitly provided for in the loan agreement/procurement plan. Irrespective of whether post qualification or prequalification is used, eligible bidders (both national and foreign) shall be allowed to participate.

## **Bidding Period**

27. Given the emergency nature of the project; the minimum bidding period is reduced to fifteen days (15) days prior to the deadline for the submission of bids.

## **Bidding Documents**

28. Procuring entities shall use the applicable standard bidding documents for the procurement of goods, works and services acceptable to ADB.

## Preferences

29. No domestic preference shall be given for domestic bidders and for domestically manufactured goods.

## Advertising

30. Invitations to bid shall be advertised in at least one widely circulated national daily newspaper or freely accessible, nationally-known website allowing a minimum of fifteen (15) days for the preparation and submission of bids. NCB contracts estimated to cost \$500,000 or more for goods and related services and &1,000,000 or more for civil works will be advertised on ADB's website via the posting of the Procurement Plan.

## **Bid Security**

31. Where required, bid security shall be in the form of a bank guarantee or call-deposit receipt (CDR) from a reputable bank.

## Bid Opening and Bid Evaluation

- (i) Bids shall be opened in public.
- (ii) Evaluation of bids shall be made in strict adherence to the criteria declared in the bidding documents and contracts shall be awarded to the lowest evaluated bidder.
- (iii) Bidders shall not be eliminated from detailed evaluation on the basis of minor, nonsubstantial deviations.
- (iv) No bidder shall be rejected on the basis of a comparison with the employer's estimate and budget ceiling without the ADB's prior concurrence.
- (i) A contract shall be awarded to the technically responsive bid that offers the lowest evaluated price and no negotiations shall be permitted.

## Rejection of all Bids and Rebidding

32. Bids shall not be rejected and new bids solicited without the ADB's prior concurrence.

## Participation by Government-owned enterprises

33. Government-owned enterprises in the Islamic Republic of Pakistan shall be eligible to participate as bidders only if they can establish that they are legally and financially autonomous, operate under commercial law and are not a dependent agency of the contracting authority. Furthermore, they will be subject to the same bid and performance security requirements as other bidders.

## **ADB Member Country Restrictions**

34. Bidders must be nationals of member countries of ADB, and offered goods and services must be produced in and supplied from member countries of ADB.

## PROJECT PROCUREMENT RISK ASSESSMENT QUESTIONNAIRE Flood Emergency Reconstruction and Resilience Project (FERRP)

Planning & Development Department, Punjab (EA)

Communication & Works Department, Punjab (IA)

Punjab Irrigation Department, (IA)

Punjab Disaster Management Agency (IA)

QUESTION	RESPONSE	RISK		
	A. ORGANIZATIONAL AND STAFF			
	PROCUREMENT DEPARTMENT/UNIT	Low		
A.1 Does the agency or Government have a Procurement Committee that is independent from the head of the agency?	No. However, there are financial thresholds for various procurements. No separate procurement committees outside the department are constituted.	Low		
A.2 Does the agency have a procurement department/unit, including a permanent office that performs the function of a Secretariat of the Procurement Committee?	Procurement is decentralized. Mostly done at filed level.	Low		
A.3 If yes, what type of procurement does it undertake?	-			
A.4 How many years' experience does the head of the procurement department/unit have in a direct procurement role?	Procurement is decentralized. The officials learn procurement at field level before they are promoted to higher level.	Low		
<ul> <li>A.5 How many staff in the procurement department/unit are:</li> <li>i. full time</li> <li>ii. part time</li> <li>iii. seconded</li> </ul>	The office of executive engineer (XEN) works on full time basis.	Low		
A.6 Do the procurement staff have a high level of English language proficiency (verbal and written)?	The staff demonstrated substantial level of verbal and written English language proficiency.	Low		
A.7 Are the number and qualifications of the staff sufficient to undertake the additional procurement that will be required under the proposed project?	Yes. In case of PDMA, necessary expertise will be engaged up-front	Moderate /Low		
A.8 Does the unit have adequate facilities,	Yes, additional facilities will be procured to	Low		

QUESTION	RESPONSE	RISK
such as PCs, internet connection, photocopy facilities, printers etc. to undertake the planned procurement?	meet the additional requirements in PIUs.	
A.9 Does the agency have, or have ready access to, a procurement training program?	Yes.	Low
A.10 At what level does the department/unit report (to the head of agency, deputy etc.)?	The office of XEN is the basic unit; reports to Superintending Engineer and Chief Engineer at divisional level.	Low
A.11 Do the procurement positions in the agency have job descriptions, which outline specific roles, minimum technical requirements and career routes?	The JDs are not in writing. However, there are institutional arrangements which help new entrants to learn the procurement practices.	Low
A.12 Is there a procurement process manual for goods and works?	Punjab Procurement Rules, 2014 (Amended) provides guidance. There is no separate procurement process manual.	Low
A.13 If there is a manual, is it up to date and does it cover foreign-assisted projects?	Punjab Procurement Rules, 2014 (Amended) provide guidance in this regard.	Low
A.14 Is there a procurement process manual for consulting services?	The processes are explained in the Punjab Procurement Rules 2014 (Amended).	Low
A.15 If there is a manual, is it up to date and does it cover foreign-assisted projects?	The Rules have been recently amended in January 2014.	Low
	PROCUREMENT MANAGEMENT UNIT	Moderate
A.16 Is there a fully (or almost fully) staffed PMU for this project currently in place?	No. There is a PMU and a PMO established previously in PID since 2004. There will be separate PIUs in the IAs for the project.	Moderate
A.17 Are the number and qualifications of the staff sufficient to undertake the additional procurement that will be required under the proposed project?	Additional expertise will be engaged from the market.	Moderate
A.18 Does the unit have adequate facilities, such as PCs, internet connection, photocopy facilities, printers etc. to undertake the planned procurement?	Additional facilities will be procured.	Moderate
A.19 Are there standard documents in use, such as Standard Procurement Documents/Forms, and have they been approved for use on ADB funded projects?	Yes.	Low
A.20 Does the agency follow the national procurement law, procurement processes, guidelines?	Yes.	Low
A.21 Do ToRs for consulting services follow a standard format such as background, tasks, inputs, objectives and outputs?	Yes. ADB templates will be used.	Low
A.22 Who drafts the procurement specifications?	Technical experts	Low
A.23 Who approves the procurement specifications?	PD	Low
QUESTION	RESPONSE	RISK
--	---	------------------
A.24 Who in the PMU has experience in drafting bidding documents?	Procurement experts will be engaged	Moderate
A.25 Are records of the sale of bidding documents immediately available?	Yes	Low
A.26 Who identifies the need for consulting services requirements?	Procurement Plan details these requirements	Low
A.27 Who drafts the Terms of Reference (ToR)	Procurement staff in coordination with technical expert	Low
A.28 Who prepares the request for proposals (RFPs)	Procurement staff	Low
B. INFORMATION MANAGEMENT		Low
B.1 Is there a referencing system for procurement files?	Yes	Low
B.2 Are there adequate resources allocated to record keeping infrastructure, which includes the record keeping system, space, equipment and personnel to administer the procurement records management functions within the agency?	Yes	Low
B.3 Does the agency adhere to a document retention policy (i.e. for what period are records kept)?	Yes, usually the records are kept for 10 years.	Low
B.4 Are copies of bids or proposals retained with the evaluation?	Yes	Low
B.5 Are copies of the original advertisements retained with the pre- contract papers?	Yes	Low
B.6 Is there a single contract file with a copy of the contract and all subsequent contractual correspondence?	Each contract is given a separate file number and treated as a separate case.	Low
B.7 Are copies of invoices included with the contract papers?	Yes	Low
B.8 Is the agency's record keeping function supported by IT?	Yes, when needed.	Low
C. PROCUREMENT PRACTICES - GOOD	S AND WORKS	Low
C.1 Has the agency undertaken procurement of goods or works related to foreign assistance recently (last 12 months or last 36 months)? If yes, indicate the names of the development partner/s and project/s.	PID is implementing various ADB funded projects (MFFs) since 2004. C&W and PDMA have not undertaken foreign-assisted project during last three years.	Moderate /Low
C.2 If the answer is yes, what were the major challenges faced by the agency?		Moderate
C.3 Is there a systematic process to identify procurement requirements (for a period of one year or more)?	Yes. Rule 8 of Punjab Procurement Rules 2014 requires the EA to prepare the annual plan and upload on the website.	Low
C.4 Is there a minimum period for the preparation of bids and if yes, how long?	Yes, 15 days	Low

QUESTION	RESPONSE	RISK
C.5 Are all queries from bidders replied to in writing?	Yes	Low
C.6 Does the bidding document state the date and time of bid opening?	Yes	Low
C.7 Are bids opened in public?	Yes	Low
C.8 Can late bids be accepted?	No	Low
C.9 Can bids (except late bids) be rejected a bid opening?	No	Low
C.10 Are minutes of the bid opening taken?	Yes, when required	Low
C.11 Are bidders provided a copy of the minutes?	Yes. When requested by the bidders	Low
C.12 Are the minutes provided free of charge?	Yes	Low
C.13 Who undertakes the evaluation of bids (individual(s), permanent committee, ad-hoc committee)?	Concerned Procurement Committee according to the financial threshold.	Low
C.14 What are the qualifications of the evaluators with respect to procurement and the goods and/or works under evaluation?	Evaluators are engineers and Accountants as members of the committee	Low
C.15 Is the decision of the evaluators final or is the evaluation subject to additional approvals?	Decisions of the evaluators are final	Low
C.16 Using the three 'worst-case' examples in the last year, how long from the issuance of the invitation for bids can the contract be awarded?	Usually the contracts are awarded within the original bid validity of bids	Low
C.17 Are there processes in place for the collection and clearance of cargo through ports of entry?	Yes	Low
C.18 Are there established goods receiving procedures?	Yes	Low
C.19 Are all goods that are received recorded as assets or inventory in a register?	Yes	Low
C.20 Is the agency/procurement department familiar with letters of credit?	Yes.	Low
C.21 Does the procurement department register and track warranty and latent defects liability periods?	Yes	Low
Consulting Services		Moderate
C.22 Has the agency undertaken foreign- assisted procurement of consulting services recently (last 12 months, or last 36 months)? (If yes, please indicate the names of the development partner/s and the Project/s.)	PID is implementing various ADB funded projects (MFFs) since 2004. C&W and PDMA have not undertaken foreign-assisted project during last three years.	Moderate
C.23 If the above answer is yes, what were the major challenges?	NA	Moderate
C.24 Are assignments and invitations for expressions of interest (EOIs) advertised?	Yes (The responses from C24 to C48 are given in light of Punjab Procurement Rules	Moderate

QUESTION	RESPONSE	RISK
	2014. There was no real time example	
	available. The EA has never engaged a	
	consulting firm through competition as there	
	was no need for a consulting firm from the	
	private sector. NESPAK is engaged to	
	provide the required services).	
C.25 Is a consultants' selection committee	Rule 40 of Punjab Procurement Rules 2014	Low
formed with appropriate individuals,	(Amended) requires formation of a CSC.	
and what is its composition (if any)?	There are 4 members (nead of procuring	
	agency, nominees of Finance Department,	
	Pad Department and a representative of	
C 26 What aritaria is used to evaluate	Pule 47 of Dunich Progurament Dules	Low
EOlo2	provide the criteria. In case of foreign	LOW
EOIS?	funded projects as prescribed by the	
	donors	
C 27 Historically, what is the most	LCS and OCBS	
common method used (OCBS_OBS		LOW
etc.) to select consultants?		
C 29 Do firmo have to nav for the DED	No	Low
document?	NO	LOW
C.29 Does the proposal evaluation criteria	Proposal evaluation criteria is detailed in	Low
follow a pre-determined structure and	the RFP	
is it detailed in the RFP?		
C.30 Are pre-proposal visits and meetings	Yes, on need basis, not as a norm	Moderate
arranged?		
C.31 Are minutes prepared and circulated	Yes, when needed,	Moderate
after pre-proposal meetings?		
C.32 To whom are the minutes	To the shortlisted firms	Low
distributed?		
C.33 Are all gueries from consultants	Yes	Low
answered/addressed in writing?		
C 34 Are the technical and financial	Yes	Low
proposals required to be in separate		2011
envelopes and remain sealed until		
the technical evaluation is		
completed?		
C.35 Are proposal securities required?	No	Low
C 36 Are technical proposals opened in	Vas	
nublic2		LOW
	Mar -	1
diatributed?	Yes	LOW
distributed?		
C.38 Who determines the final technical	CSC, majority voting	Moderate
ranking and how?		
C.39 Are the technical scores sent to all	On request basis	Moderate
firms?		
C.40 Are the financial proposal opened in	Yes	Low
public?		
C.41 Are minutes of the financial opening	Yes, when requested	Moderate
distributed?	,	
C.42. How is the financial evaluation	Financial evaluation is completed according	Low
completed?	to the procedure prescribed in the RFP	2000
C 42 Are feed to feed contract		
0.43 Are face to face contract	res	LOW

QUESTION	RESPONSE	RISK
negotiations held?		
C.44 How long after financial evaluation is negotiation held with the selected firm?	Within 15 days	Low
C.45 What is the usual basis for negotiation?	Technical and financial issues	Low
C.46 Are minutes of negotiation taken and signed?	Yes	Low
C.47 How long after negotiation is the contract signed, on average?	15 days	Low
C.48 Is there an evaluation system for measuring the outputs of consultants?	Yes, head of agency gets feedback from the user department	Low
Payments		Low
C.49 Are advance payments made?	Yes	Low
C.50 What is the standard period for payment included in contracts?	30 days	Low
C.51 On average, how long is it between receiving a firm's invoice and making payment?	30 days	Low
C.52 When late payment is made, are the beneficiaries paid interest?	No	Moderate
D. EFFECTIVENESS		Low
D.1 Is contractual performance systematically monitored and reported?	Yes	Low
D.2 Does the agency monitor and track its contractual payment obligations?	Usually the contractor pushes for payments; Accountant General office, Punjab makes payments directly to the contractor.	Low
D.3 Is a complaints resolution mechanism described in national procurement documents?	Yes, however, its effectiveness is not fully known.	Moderate
D.4 Is there a formal non-judicial mechanism for dealing with complaints?	Yes	Low
D.5 Are procurement decisions and disputes supported by written narratives such as minutes of evaluation, minutes of negotiation, notices of default/withheld payment?	Varies from case to case basis	Moderate
E. ACCOUNTABILITY MEASURES		Low
E.1 Is there a standard statement of ethics and are those involved in procurement required to formally commit to it?	Government of the Punjab's Conduct Rules govern the conduct of officials.	Low
E.2 Are those involved with procurement required to declare any potential conflict of interest and remove themselves from the procurement process?	Yes. However, they are not fully and effectively familiar with the concept of conflict of interest.	Moderate

QUESTION	RESPONSE	RISK
E.3 Is the commencement of procurement dependent on external approvals (formal or de-facto) that are outside of the budgeting process?	No	Low
E.4 Who approves procurement transactions, and do they have procurement experience and qualifications?	Depending on the value, there are different authorities for technical sanctioning of the project.	Low
E.5 Which of the following actions require approvals outside the procurement unit or the evaluation committee, as the case may be, and who grants the approval?	All approvals are given within the IA	Low
a) Bidding document, invitation to pre- qualify or RFP		
b) Advertisement of an invitation for bids, pre-qualification or call for EOIs		
c) Evaluation reports		
d) Notice of award		
e) Invitation to consultants to negotiate		
f) Contracts		
E.6 Is the same official responsible for: (i) authorizing procurement transactions, procurement invitations, documents, evaluations and contracts; (ii) authorizing payments; (iii) recording procurement transactions and events; and (iv) the custody of assets?	No	Low
E.7 Is there a written auditable trail of procurement decisions attributable to individuals and committees?	Yes	Low

Appendices: Appendix 1: P-RAMP Appendix 2: Completed questionnaire

# Outline Terms of Reference: Project Management Consultants

# Described below outline terms of reference for Design Consultants and PMCs for each of the project IAs

### C&W Department (Haveli, Kotli and Poonch Districts)

#### **Design Consultants**

Consultancy services are required to be covered for a period of six months for field surveys, engineering studies, design, design review and preparation of engineering drawings for the flood-affected roads in the affected districts. It will be conducted under the supervision of the C&W department. A total of 65 person-months of consultancy would be required. The outline terms of reference for specialists are given below:

- (i) Team Leader: Qualified civil engineer with at least 10 years' experience of managing similar works in the road sector in Pakistan. S/he will have overall responsibility for the organization, conduct and delivery of consultancy services and reporting. He will head the consultancy service, work directly, and manage relations, with the Client.
- (ii) Highway Engineer: Qualified civil engineer with at least seven years' experience of highway engineering. S/he will be responsible for designing especially in geometric design, designs for road features and road safety/traffic control features, drainage designs, rehabilitation and repair plan, traffic plans and amenities including detailed drawings and specifications.
- (iii) Pavement Engineer: Qualified civil engineer with at least seven years' experience of pavement engineering. S/he will be responsible for assessing pavement condition of the roads, develop cost-effective pavement designs applicable to the project roads, selection of design based on various material options and local conditions, and design shoulders including detailed drawings and specifications.
- (iv) Structural Engineer: Qualified civil engineer with at least ten years' experience of bridge structures engineering. S/he will be responsible for designing especially on cost effective, multi-hazard resistant design, design the structural elements of roads component and bridges, including detailed structural drawings and specifications.
- (v) Geotechnical Engineer/Material Engineer: Qualified civil engineer with at least seven years' experience of geotechnical/material engineering. S/he will be responsible for geotechnical investigations and sub-surface explorations for road and structures, stipulate material testing procedures and specifications, identify sources of materials, quarry sites, and borrow areas.
- (vi) Procurement Specialist: Qualified civil engineer with at least 5 years' experience of procurement especially under PPRA procurement guidelines for works, goods and services. S/he will be responsible preparation/review of prequalification/bidding documents, designing of qualification/evaluation criteria based on input from the concerned departments and preparing standard contract agreements and contract documents. Knowledge of ADB Procurement Guidelines would be an advantage.

- (vii) Transport Economist: A post graduate degree in the transport engineering, transport economy, engineering economy, or similar field, and at least five years of related experience preferably on multilateral finance institution financed projects. S/he will evaluate the feasibility of selected roads, where required, or assist in justifying the additional cost of upgrading existing roads, supervise necessary traffic surveys for the project roads, prepare traffic forecasts for representative traffic types for normal, generated, and diverted traffic taking into account population growth, production increases, economic growth, and income increase, and assess the anticipated average annual daily traffic. Where required calculate the Economic Internal Rate of Return (EIRR) for individual projects in order to arrive at the economic viability of investment, calculate the benefit cost ratio (B/C Ratio) of individual projects, asses investment costs against operation and maintenance cost (sustainability).
- (viii) Chief Surveyor Qualified civil engineer (or relevant qualification) with at least 7 years' experience of field surveys for highway projects. S/he will be responsible for supervising and managing the team of surveyors in the field and producing all the requisite data, drawings and other details required for the design of the individual subprojects.
- (ix) Quantity Surveyor: Qualified civil engineer with at least 5 years' experience as quantity surveyor of road projects. S/he will be responsible for preparing the Bills of Quantities and the Engineer's Estimates for the individual subprojects.
- (x) Resettlement Expert: Post graduate degree in the social sciences or a similar field. At least 7 years' experience in resettlement planning and monitoring preferably on multilateral finance institution financed projects. S/he would be responsible for carrying out the social due diligence on sites for all proposed subprojects, conduct stakeholder consultation and identify the resettlement issues, prepare and update resettlement plans or due diligence reports if needed, following the guidelines of ADB and Government and the resettlement framework using guidelines provided and agreed with ADB, and assist in the implementation of the plans should it be required.
- (xi) Environmental Specialist

Graduate degree in civil/environmental engineering or post-graduate degree in environmental science or a related discipline is required and have at least 7 years of experience in environmental management and monitoring of projects, environmental assessment and/or design and implementation of environmental mitigation measures.

(xii) Traffic Engineer

Graduate degree in civil or post-graduate degree in transportation engineering or a related discipline is required and has at least 7 years of experience in civil engineering. Must have relevant experience of working in traffic forecasting, conducting traffic surveys and analysis of capacity and level of service,

The breakup of consultancy input of key staff for both packages is given below:

No	Designation	Positions	International /National	Input(Person Months)
1	Team Leader	1	National	4
2	Highway Engineer	2	National	8
3	Pavement Engineer	2	National	8
4	Structural Engineer	2	National	8

No	Designation	Positions	International /National	Input(Person Months)
5	Geotechnical Engineer/Material Engineer	2	National	8
6	Procurement Specialist	1	National	2
7	Transport Economist	1	National	1
8	Chief Surveyor	1	National	2
9	Quantity Surveyor	2	National	8
10	Environmental Expert	2	National	8
11	Sociologist/Resettlement Specialist	2	National	6
12	Traffic Engineer	1	National	1
13	Contract Engineer	1	National	1
Tota		20		65

# **Project Management Consultants**

A total of 408 person-months of national consultancy are planned for the Project. The outline terms of reference for key persons are given below:

- (i) Team Leader: Qualified civil engineer experience of managing similar works in the transportation sector in Pakistan or abroad. S/he will have overall responsibility for the organization, conduct and delivery of consultancy services and construction contracts, and reporting. He/she will head the PMC and will work directly, and manage relations, with the client. He/she responsible for all liaisons with and reporting to the client, and for financial control of the consultancy, provide overall guidance and advise to construction supervision/contract administration team, amicably resolve any disputes during the construction and provide decisions whenever required and overall responsibility for progress and completion with assistance from team members.
- (ii) Resident Engineer: Qualified civil engineers with at least 10 years' experience as a resident engineer in construction supervision of roads in Pakistan whereas experience in hilly terrain would be preferable. They will supervise the work of Assistant Resident Engineers (AREs) and rest of construction supervision teams and will manage the construction milestones and quality control of works. They will provide assistance to the Team Leader in overall management, monitoring and reporting and will be responsible for day-to-day management of works. The construction works will be executed in accordance with the Conditions of Contract contained in ADB's standard documents as appropriate and in accordance with Conditions of Contract. Accordingly, the Project Director PMU will be the Employer, and the consultant will be the Engineer for all civil work contracts.
- (iii) Assistant Resident Engineer (Assistant Resident Engineer Highways and Assistant Engineer Structures): Qualified civil engineers with at least 7 years' experience in construction supervision of similar works in Pakistan whereas experience in hilly terrain would be preferable. They will be responsible for construction supervision and review and approval of contractor's bills. The Assistant Resident Engineer will assist the Resident Engineer (RE) in the performance of assigned tasks.
- (iv) Materials /Quality Engineer: Qualified Civil Engineer holding bachelor's degree or higher with at least 7 year experience of working in the similar capacity on road construction projects. S/he will assist the RE and will be responsible for quality of material used in construction by performing field and laboratory tests and certifying their acceptance based on his/her recommended specifications for the materials.

- (v) Geotechnical Engineer: Qualified geotechnical engineer holding bachelor's degree in civil engineering or masters' degree in geology/geo-tech engineering with at least 7 year experience of working in the similar capacity on road construction projects. S/he will review the design and if required during construction any modification and change in design, construction method, alternate technology of construction and provide oversight during the consultancy service.
- (vi) Highway Design Engineer: Qualified civil engineer with at least 07 years of experience in highway engineering design and coordination during construction. S/he will be responsible for review and revision of design involving geometric design, designs for road features and road safety/traffic control features, drainage designs, rehabilitation and repair plan, traffic plans and amenities including detailed drawings and specifications. He/she will propose if required, during construction any modification and change in design, construction method and alternate technology of construction. He/she will provide management's oversight during the consultancy service.
- (vii) Structural Design Engineer: Qualified Civil engineer with at least 07 years' experience of structural designing whereas experience in highway structure designing is must. He/she will be responsible for reviewing the structural drawings, methods, specifications and codes, cost effective, multi-hazard resistant design, S/he will propose if required, during construction any modification and change in design, construction method and alternate technology of construction. S/he will provide management's oversight during the consultancy service.
- (viii) Pavement Design Engineer: Qualified civil engineer with at least 07 years' experience of pavement engineering. S/he will be responsible for reviewing the design related to pavement condition of the roads, its cost-effectiveness, suitability of material, material options and local conditions, including detailed drawings and specifications. He/she will provide management's oversight during the consultancy service.
- (ix) Contract Specialist: Qualified civil engineer with at least 10 years' experience in civil works contracts, procurement and management. Experience and knowledge of ADB's procurement procedures is essential. S/he will be responsible for assisting the client, Team Leader and Resident Engineers in all the activities pertaining to contract management of civil works contracts, early warning of key contractual actions, schedule and document contract management meetings and evaluating/resolving contractor's claims and contractual disputes.
- (x) Planning Engineer: Qualified civil engineer with at least 07 years' experience in project management on civil works contracts. S/he will be responsible for assisting the client, Team Leader and Resident Engineers in all the activities pertaining to planning and scheduling of the sub-projects, particularly the review and approval of the contractor's work program and its subsequent monitoring. S/he will as also coordinate with the Contracts Specialist for early warning of key contractual actions, as well as assist in evaluating/resolving contractor's claims and contractual disputes.
- (xi) Monitoring & Evaluation Specialist: Post graduate degree in the social sciences or bachelor's degree in engineering with experience of coordinating and monitoring projects. At least 10 years' experience in designing system, carrying out monitoring and

evaluation and preparing reports. S/he will be responsible for monitoring project activities, including project performance monitoring system, periodic information dissemination on web-site related to the project. He/she will be responsible for collating all the information and submit it on approved format to the PMU.

- (xii) F&A Specialist: Qualified chartered/cost management accountant or M.B.A. (finance) with at least 5 years of professional experience. The incumbent will be responsible for assisting PMU preparing monthly financial statements and project accounts; pre-audit and verification of all contractor/supplier bills prior to payment; preparation of monthly project accounts and financial reports; preparation of monthly internal auditing reports for ADB and the borrower; providing requisite financial input for the quarterly progress reports; assisting the IA in preparation of complete and correct withdrawal applications and ensuring prompt submission to ADB; and preparation of annual financial statements and accounts within one month of closing of the Government's fiscal year, and coordinating the external audit activity
- (xiii) Resettlement Expert: Post graduate degree in the social sciences or a similar field. At least 7 years' experience in resettlement planning and monitoring preferably on multilateral finance institution financed projects. S/he would be responsible for carrying out the social due diligence on sites for all proposed subprojects, conduct stakeholder consultation and identify the resettlement issues, prepare and update resettlement plans or due diligence reports if needed, following the guidelines of ADB and Government and the resettlement framework using guidelines provided and agreed with ADB, and assist in the implementation of the plans should it be required.
- (xiv) Environmental Specialist: Graduate degree in civil/environmental engineering or postgraduate degree in environmental science or a related discipline is required and have at least 7 years of experience in environmental management and monitoring of projects, environmental assessment and/or design and implementation of environmental mitigation measures. S/he will be responsible for due diligence on environmental safeguards. The Environmental Expert will be responsible for monitoring the implementation of environmental management plan throughout the whole project implementation stage, undertaking remedial action in close consultation with respective EPA and ADB to handle unexpected environmental impacts and submitting the monitoring report on EMP to the relevant agencies and ADB.
- (xv) Gender Specialist: Qualified sociologist (preferably post graduate) with at least 05 years of experience in nongovernment organizations, government agencies and research institutes in Pakistan, with direct involvement in the development and implementation of gender mainstreaming features in development projects. S/he will assist PMU in gender mainstreaming in subprojects and assist in implementation and monitoring of FERP Gender Action Frameworks/Plans.

S #	Designation	Position	International /National	Input(Person Months)
1	Team Leader	1	National	36
2	Resident Engineer	2	National	78
3	Assistant Resident Engineers	4	National	156
4	Material Engineer	2	National	30
5	Contract Specialist	1	National	39
6	Geotechnical Design Engineer	1	National	6
7	Highway Design Engineer	1	National	6
8	Structure Design Engineer	1	National	6
9	Pavement Design Engineer	1	National	6
10	M&E Specialist	1	National	9
11	F&A Specialist	1	National	9
12	Resettlement Specialist	1	National	9
13	Environmental Specialist	1	National	9
14	Gender Specialist	1	National	9
	Total	23		408

The breakup of consultancy input of key staff is given below:

# **Project Management Consultants Punjab Irrigation Department**

The Punjab Irrigation Department (PID) is going to implement flood protection works for restoration and upgrading of existing flood protection works damaged due to floods of 2014. Project management consultants are required to review the designs and assist in construction supervision, procurement, financial management, safeguard compliance and implementation of the sub-projects. The consultancy services are required for 24 months. About 284 personmonths including 76 person-months of key experts along with technical and non-technical support staff will be required for the implementation of restoration and improvement works in 285 KMs of damaged flood protection. The composition of key staff of consultants is as below;

Sr No	Position	No of Positions	International/ National	Input (Person- Months)
1	Team Leader/CRE	1	National	24
2	Deputy Team Leader/Office Engineer	1	National	24
3	Planning and Scheduling Engineer	1	National	3
4	Principal Structural Design Engineer	1	National	4
5	Hydraulics Engineer	1	National	4
6	Structural Design Engineer	1	National	2
7	Geotechnical Engineer	1	National	3
8	Quality Control Engineer	1	National	6
9	Environmental Specialist	1	National	6
	Total			76

The consultants will report to the Project Director appointed by the Government of Punjab as Head of the Project Implementation Unit (PIU). Outline TORs for key experts are given below:

# a. <u>Team Leader/ Chief Resident Engineer (CRE)</u>

<u>Qualifications & Experience:</u> B.Sc. Civil Engineering with M.Sc. in Water Resource Management or M.Sc. Civil Engineering or M.Sc. Construction Management. Twenty (20) years of experience in planning, designing & construction supervision of water resources/flood management structures on major river systems. Five years of specific experience in supervision of water resources projects as Chief Engineer/Team Leader.

Responsibilities of the Team Leader CRE will include, but is not limited to the following:

- (i) Assist the PIU in Project implementation.
- (ii) Assume full responsibility for the consulting team and performance of services under the consultancy contract.
- (iii) Ensure that the consulting team undertakes comprehensive review of the detailed designs and specifications which were prepared by the irrigation department.
- (iv) Ensure that the consulting team undertakes comprehensive construction supervision and contract administration of the inescapable civil works included in the emergency flood restoration project.
- (v) Oversee the consultants activities ensuring compliance to details provided in the construction drawings and strict adherence to construction specifications.
- (vi) Oversee and supervise construction of works in accordance with details provided in the construction drawings ensuring strict adherence to construction specifications.
- (vii) Ensure preparation of detailed and quantitative progress reports to support the contractor's requests for progress payments.
- (viii) Keep the Employer informed of technical issues and progress of all works both by informal and formal meetings and correspondence and assist in any project issue which the Employer may require.
- (ix) Participate in the Dispute Board meetings to explain and discuss issues raised by the Contractor/Employer or dispute board.
- (x) Ensure implementation of environment and social safeguards requirements.
- (xi) Assist the Employer in preparing responses to audit objections and queries of the financiers or other Government Authorities.
- (xii) Coordinate with all concerned Employer's organizations on project issues.
- (xiii) At the end of the construction activities, guide and ensure that the team prepares a comprehensive Construction Completion Report inclusive of 'as-built drawings" as appropriate.

# b. <u>Deputy Team Leader/ Engineer</u>

<u>Qualifications & Experience:</u> B.Sc. Civil Engineering and preferably M.Sc. Construction Management. Fifteen (15) years of experience in procurement of civil works, contract management, processing of claims and implementation of flood works. Also 5 years of specific experience related to procurement under ADB/ World Bank Projects using ICB procedures under FIDIC Conditions of Contract for Construction.

<u>Responsibilities</u> of the Deputy Team Leader/ engineer will include, but are not limited to the following:

- (i) Act as the Team Leader during the absence of Team Leader.
- (ii) Assist the Team leader in ensuring that the consulting team undertakes comprehensive review of designs and specifications and carries out construction supervision and contract administration of the civil works for the Project assuming the role of "the

Engineer" and undertake all tasks as defined under FIDIC General Conditions of Contract for Construction.

- (iii) Assist the team leader in overseeing the consultants activities ensuring compliance to detail provided in the construction drawings and strict adherence to construction specifications.
- (iv) Assist the Team Leader in overseeing quality control methodology put in place, confirming its adequacy and ensuring that its employment is satisfactorily carried out.
- (v) Render necessary advice and assist the Team leader in contract administration and procurement issues/assignments/contractual claims.
- (vi) Assist the Team Leader in resolving any contractual issues.
- (vii) Determine extension of time for completion and other claims in accordance with the conditions of contract in consultation with the Team Leader/ Chief Engineer.
- (viii) Provide assistance to the Employer in dispute resolution as per provisions in the conditions of contract.
- (ix) Assist the Team Leader in keeping the Employer informed of contractual and claims issues by direct contacts and through discussions or correspondence.
- (x) Assist the Team Leader/Chief Engineer in holding meetings with the Contractor on contract and claims issues.
- (xi) Assist the team leader in preparing a comprehensive Project Completion Report (PCR) and any other duty/ assignment the Team Leader may entrust.

### c. <u>Planning & Scheduling Engineer</u>

<u>Qualifications & Experience:</u> B.Sc. Civil Engineering and preferably M.Sc. Hydraulics/ Construction Management. Ten (10) years of experience in planning & design of hydraulic structures and construction supervision of water resource projects especially flood protection works/River training works on major river systems. The <u>Planning & Scheduling Engineer reports</u> to the Team Leader.

<u>Responsibilities</u> of the Planning and Scheduling Engineer will include but not limited to the following:

- (i) Take the overall responsibilities for project planning, scheduling, reporting and project costing including preparation of engineer estimate/ revised PC-1.
- (ii) Analysis and approval of Tender Schedule, Baseline Schedule, Revised Baseline Schedule and Recovery Schedule submitted by the contractor on a computerized system Primavera Enterprise for Engineering & Construction (P6)software.
- (iii) Assist the Team Leader in determining the extension of time for completion from the Contractor's Work Schedule.
- (iv) Furnish progress schedules and Earned Value Reports to the Team Leader.
- (v) Monitor that the Contractor adheres to the contractual requirements of Construction Schedule mentioned in the Special Provisions.
- (vi) Monitoring of various activities shown on the Baseline schedule.

# d. <u>Principal Structural Design Engineer</u>

<u>Qualifications & Experience:</u> B.Sc. Civil Engineering and preferably M.Sc. Structural Engineering. 15 Years of professional experience in design of hydraulic structures. Also 10 years of specific experience in structural design of river control structures, bridges, river training and flood protection works on major rivers and large canals

<u>Responsibilities</u> of the Principal Structural Design Engineer will include, but are not limited to the following:

- (i) Act as the lead consultant for design review team.
- (ii) Review and approve all relevant technical documents.
- (iii) Organize and supervise any additional investigations deemed necessary for structural aspects of river training/ flood protection works to be included in the Project.
- (iv) Analyse structural design options for sustainability of flood protection works and propose changes where required.
- (v) Guide and draft relevant portions of the specifications of flood works.

# e. <u>Hydraulics Engineer</u>

Qualifications &Experience: B.Sc. Civil Engineering and preferably M.Sc. water resources/ Hydraulics. 10 years of professional experience in design of civil works in major hydraulic projects. Also 5 years of specific experience in design of river training works and flood protection works on major rivers.

<u>Responsibilities</u> of the Hydraulic engineer will include, but are not limited to the following:

- (i) Review all relevant design reports and documents.
- (ii) Organize and supervise topographic surveys and any other investigations required to provide necessary input for design.
- (iii) Supervise and ensure follow-up action of physical model tests, if any, and take the lead in recommending modifications to and refinement of the model to ensure reliable output.
- (iv) Review hydraulic design options for river training works and flood protection works at barrages and important cities and towns to ensure maximum flood resilience.
- (v) Coordinate and supervise detailed design of all hydraulic aspects of the flood works including preparation of relevant additional construction drawings and specifications which may be required.

# f. <u>Structural Design Engineer</u>

Qualifications & Experience: B.Sc. Civil Engineering and preferably M.Sc. Structural Engineering. Ten (10) years of professional experience in design of hydraulic structures, including 5 years of specific experience in structural design of river control structures, bridges, river training and flood protection works on major rivers and large canals.

<u>Responsibilities</u> of the Structural Design Engineer will include but are not limited to the following:

- (i) Review all relevant technical documents
- (ii) Organize, supervise and carry-out any additional investigations deemed necessary for structural aspects of any feature to be included in the Project;
- (iii) Analyse structural design options for sustainability of flood protection works and propose changes where required
- (iv) Assist in drafting relevant portions of the specifications of flood works

# g. <u>Geotechnical Engineer</u>

Qualifications & Experience: B.Sc. Civil Engineering or Geological Engineering with Master's degree in Geotech Engineering or Foundation Engineering. Ten (10) years of specific experience related to foundation investigation and design of major hydraulic structures and embankments.

<u>Responsibilities</u> of the Geo-tech Specialist will include but are not limited to the following:

- (i) Review all relevant technical documents
- (ii) Carry out (organize and oversee) comprehensive review of foundation conditions at each structure ensuring long-term integrity of the Project components
- (iii) Identify any remedial foundation stabilization work to be included in the work package for construction of flood protection works
- (iv) During the construction phase, investigate and evaluate any unexpected foundation conditions encountered and recommend alternative treatment as appropriate

# h. Quality Control Engineer

Qualifications & Experience: B.Sc. in Civil Engineering and preferably M.Sc. concrete structures/Construction Management/Geo-technical Engineering. Ten (10) years of experience in quality control on construction of large construction projects. He should be well versed with testing requirements for enforcing quality control on water resources projects, especially, river training and flood protection works

<u>Responsibilities</u> of the Quality control engineer will include, but are not limited to the following:

- (i) Prepare an appropriate Quality Control Manual for construction supervision of the Project. The Manual will describe the testing requirements during construction
- (ii) Advise on suitability of various construction materials proposed to be used in construction of river training works / flood embankments
- (iii) Ensure that the Quality Control Manual is strictly followed by the Project team and bring out all deficiencies to the notice of the Team Leader/ Deputy Team Leader/ Resident Engineer promptly
- (iv) Evaluate contractor's proposal for establishment of field laboratory and approve other laboratories for testing
- (v) Ensure that the routine detailed and quantitative progress reporting is adequate to support the contractor's requests for progress
- (vi) Establish and oversee appropriate standards and quality control procedures
- (vii) Ascertain that construction inspectors are fully cognizant of all required density testing during construction and the methodology to be employed.

# i. <u>Environmental Specialist</u>

Qualifications & Experience: Master's degree in Environmental Sciences/Environmental Engineering. Five (5) years of professional experience in conducting environmental screening/ assessment of major water resources projects. Specific experience in a similar position on water resources projects in accordance with GoP and ADB's Environmental Guidelines will be preferred.

Responsibilities of the Environmental Specialist will include but not limited to the following:

- (i) Review all relevant documents, particularly the Environmental Impact Assessment study
- (ii) Prepare/ update a cost effective environmental management and monitoring plan for rehabilitation of the flood protection works, which is in line with IEE/ EMP recommendations so as to ensure minimal environmental effects both during and following the construction period
- (iii) Review the site specific environmental management plan (SSEMP) for each sub-project and ensure its effective implementation

- (iv) Prepare and execute required appropriate actions to mitigate any negative environmental impacts associated with construction activities in collaboration with PMU and all concerned stakeholders
- (v) Prepare a detailed reforestation plan for the Project and supervise its implementation during construction process as required in the IEE/ EMP
- (vi) Develop training materials for PID and PMU staff to support environmental protection measures and to monitor and mitigate potential environmental impacts
- (vii) Ensure that any environmental impact assessments, if required, fully comply with ADB Guidelines Safeguards Policy Statement (SPS, 2009) and ensure that all required mitigation measures are identified and acceptable. Ensure that the environmental management and monitoring plans reflecting full details regarding the estimated mitigation costs are in place through the SSEMP
- (viii) Besides assisting in finalizing the biannual environmental monitoring report, he/ she will also assist the PMU in finalization of quarterly progress report, annual progress report and any specific report asked by the PMU.

# C&W Department, Punjab Province

PMC services are required to review design and assist IA in construction supervision, reporting, performance monitoring, financial management, procurements, and management of civil works contracts, safeguards compliance, and implementation of subprojects.<sup>18</sup> The TOR stipulates the international and national consulting services required for the rehabilitation of flood affected provincial highways. Consultancy services are required to be covered for 24 months. About 326 person-months (key experts) of consultancy service would be required for the rehabilitation of 1700<sup>19</sup>kilometers (kms) roads and bridges. The consultants will report to the Project Director of C&W appointed by GoPb as head of the PMU. The outline TOR for specialists/key experts are given below

No	Expertise	Positions	International / National	(Person- month)
1	Team Leader/Project Manager	1	National	20
2	Deputy Team Leader, Design Review	1	National	3
3	Procurement Specialist	1	National	3
4	Contract Specialist	1	National	20
5	Highway Engineer	1	National	12
6	Geotechnical Engineer	1	National	4
7	Pavement Engineer	1	National	4
8	Structural Engineer	1	National	8
9	M&E Specialist	1	National	20
10	Finance and administration Specialist	1	National	20
11	Resettlement Specialist	1	National	20
12	Grievance officers	1	National	20
13	Environment Specialist	1	National	6
14	Gender Specialist	1	National	6
15	Resident Engineer	2	National	40
16	Assistant Resident Engineer	4	National	80
17	Material Engineer	2	National	40

The team composition of PMC for C&W Punjab is as following:

<sup>&</sup>lt;sup>18</sup> The selection criteria of subprojects is provided in Annex 1 while the list of proposed subprojects are in Annex 2.
<sup>19</sup>Person-months are dependent on the actual kms to be rehabilitated, and will be firmed up after loan is effective.

- (i) Team Leader/Project Manager (national): Qualified civil engineer with at least 15 years of project management experience in road construction works, internationally as well as in Pakistan. It includes managing projects with wider geographic spread, a large team and large number of construction packages of varying size and complexities. S/he will have overall responsibility for the organization, conduct and delivery of consultancy services and reporting to PMU. PM will head the PMC and will work directly, and manage relations, with the PMU.
- (ii) Deputy Team Leader, Design (national): Qualified civil engineer with at least 15 years' experience of road design experience. S/he will guide the design work of the project based on the reconstruction strategy and will be responsible for day-to-day management of design works; and provide assistance to the Team Leader/Project Manager in reporting and coordination with client on design aspects of the project.
- (iii) Procurement Specialist (national): Qualified civil engineer with at least eight years' experience of procurement especially on GoP and ADB procurement guidelines for works, goods, and services. S/he will be responsible for assisting in planning/scheduling of procurement actions, preparation of TORs, expression of interest (EOI) and overall management of bid process which includes pregualification notices, preparation/review of prequalification/bidding documents including request for proposals (RFP), designing of gualification/evaluation criteria based on input from the concerned departments and ensure technical as well as financial evaluation of bids/proposals in accordance with given evaluation criteria, prepare standard agreement and contract documents; review agreements and contracts prepared by others; and facilitate award of contracts. He/she will be responsible for dissemination of information on results of procurements and will be assisting in determining the supply side capacity of construction industry in Pakistan. He/she will also be responsible for procurement oversight.
- (iv) Contract Specialist (national): Qualified civil engineer with at least eight years international experience of contract administration of FIDIC contract agreements. S/he will be responsible for assistance in contract administration of all the works/supply contracts, taking timely contractual actions related to cost, time, and quality controls and finishing of the contracts, referral to the adjudication and arbitration in case of dispute.
- (v) Highway Engineer (national): Qualified civil engineer with at least seven years' experience of highway engineering. S/he will be responsible for designing especially in geometric design, designs for road features and road safety/traffic control features, drainage designs, rehabilitation and repair plan, traffic plans and amenities including detailed drawings and specifications.
- (vi) Geotechnical Engineer (national): Qualified civil engineer with at least seven years' experience of geotechnical/material engineering. S/he will be responsible for geotechnical investigations and subsurface explorations for road and structures, stipulate material testing procedures and specifications, identify sources of materials, quarry sites and borrow areas.
- (vii) Pavement Engineer (national): Qualified civil engineer with at least seven years' experience of pavement engineering. S/he will be responsible for assessing pavement

condition of the roads, develop cost-effective pavement designs applicable to the project roads, selection of design based on various material options and local conditions, and design shoulders including detailed drawings and specifications.

- (viii) Structural Engineer (national): Qualified civil engineer with at least seven years international experience of structure engineering especially in bridges and erosion/flood protection works. S/he will be responsible for designing especially on cost effective, multi-hazard resistant design, design the structural elements of roads component and bridges, including detailed structural drawings and specifications.
- (ix) Monitoring & Evaluation Specialist (national): Qualified civil engineer/MBA social sciences/BA with at least 10 years' experience in monitoring and evaluation. S/he will be responsible for periodic progress reporting and monitoring of the project, as well dissemination of information periodically on web-site related to the project.
- (x) Finance and Administration Specialist (national): Qualified chartered/cost management accountant or MBA (finance) with at least seven years of professional experience. S/he will be responsible for preparing monthly financial statements and project accounts; preaudit and verification of all contractor/supplier bills prior to payment; preparation of monthly project accounts and financial reports; preparation of monthly internal auditing reports for ADB and the borrower; providing requisite financial input for the quarterly progress reports; assisting the IA in preparation of complete and correct withdrawal applications and ensuring prompt submission to ADB; and preparation of annual financial statements and accounts within one month of closing of the Government's fiscal year, and coordinating the external audit activity.
- (xi) Resettlement Specialist (national): Post graduate degree in social sciences or an equivalent field, and 10 years' experience in resettlement planning and implementation preferably in projects finance by multilateral finance institutions. S/he will assist PMC on social safeguard compliance on the subprojects.
- (xii) Grievance officers (national): Post-graduate qualification in community development, and at least 10 years' experience in community consultation, participation, mobilization and grievance handling. S/he will design the overall grievance system including TOR, linkages to the Ombudsman's Office, and build capacity of the PMU.
- (xiii) Social mobilizers (national): A university degree in the social sciences or gender and development with five years' experience in developing and administering social survey questionnaires. S/he will be responsible for collecting data, field visits, periodic reporting and follow up actions to ensure that all work related to social safeguard is timely submitted to the resettlement specialist.
- (xiv) Environment Specialist (national): A graduate degree in environmental engineering or post-graduate degree in environmental science or a related discipline is required; and will have at least five years of experience in environmental management and monitoring of projects, environmental assessment and/or design and implementation of environmental mitigation measures. S/he will support the PMU's Environment and Social Units (ESUs). S/he will be responsible for preparing environmental screening checklists and classifying sub-projects that have not been yet classified, preparing and obtaining IEEs and Environmental Management Plans (EMP), providing support to the ESU for

ensuring that EMPs are included in tender documents, ensuring prior clearance, monitoring, course corrections, consultations, due diligence, disclosures.

- (xv) Gender Specialist (national): Qualified sociologist (preferably post graduate) with at least five years of experience in nongovernment organizations, government agencies and research institutes in Pakistan, with direct involvement in the development and implementation of gender mainstreaming features in development projects. S/he will assist PMU in identifying scope for gender mainstreaming and assist in implementation and monitoring of FERP Gender Action Frameworks.
- Resident Engineer (national): Qualified civil engineer with at least 15 years' experience (xvi) of construction supervision of road/bridges. The Resident Engineer (RE) will be assisted by Assistant Resident Engineers and will be responsible for quality, cost, scope, time, safety, and environmental control of the subprojects. RE will be responsible for approving contractor's work program, method statements, material sources, preparing and issuing reports as defined subsequently, approving and/or issuing working drawings, approving the setting out of the works, and instructing the contractor, certifying work volume and recommending interim certificates for progress payments, maintaining consolidated project accounts, and preparing of financial statements, ensuring minimum disruption/damage to the environment by approval of contractors' work statement/methodology, including monitoring the impact of construction works on the environment and local settlements and providing information to PMU, PMC, and the ADB on the monthly progress reports.
- (xvii) Assistant Resident Engineer (national): Qualified civil engineer with at least 10 years' experience of construction supervision of road/bridges. ARE will assist the RE in the performance of his tasks. The main responsibilities of the position will include inspection of the site, finalize joint surveys with contractors, assist the RE and recommend approval of contractor's work program, method statements, material sources, assist the RE in preparing and issuing reports as defined subsequently, review and recommend approval and/or issuing working drawings, approval of the setting out of the works, and instruction to the contractor, taking measurements and keep measurement records, certifying work volume and recommending interim certificates for progress payments to RE.
- (xviii) Material Engineer (national): Qualified civil engineer with at least 10 years' experience of material engineering. S/he will assist the RE and will be responsible for quality of material used in construction by performing field and laboratory tests and certifying their acceptance based on recommended specifications for the materials; and will identify sources of materials, and quarry site.

# Terms and Reference of Individual Consultants for DRM Component

Under the DRM component, services of individual consultants will be hired for a total of 154.3 person-months including 11.8persons months of international consultants, as shown in the table below.

No.	Position	Executing/ Implementing Agency	No of positions	Person- months
A. Int	ernational			
1	Hydraulic Structure Specialist	PID	1	4.0
2	Dams Expert	PID	1	4.0
3	Geologist	Pⅅ*	1	2.0
4	Climate-Change Specialist	Pⅅ *	1	1.8
	Total (International)		4	11.8
B. Na	tional			
1	GIS and Remote Sensing Expert	PDMA	1	12.0
2	Hydro-Meteorologist	PDMA	1	4.0
3	Seismologist	PDMA	1	4.0
4	Four Sector Specialists (4 person-months each)	PDMA	4	16.0
	Training Modules Development and Facilitation			
5	Specialist	PDMA	1	12.0
6	Hydraulic Structure Specialist	PID	1	4.0
7	Dams Expert	PID	1	4.0
8	DRM Specialist	PID	1	4.0
9	Network Specialist	PID	1	12.0
10	GIS Specialist	PID	1	4.0
11	Geologist	Pⅅ*	1	6.0
12	Two Forestry Specialists (18 person-months each)	Pⅅ*	1	36.0
13	Two Research Associates	Pⅅ *	2	3.6
14	Six Sector Specialists (1.8 person-months each)	Pⅅ*	6	10.9
15	Website Developer	Pⅅ *	1	10.0
	Total (National)		24	142.5
	TOTAL CONSULTING INPUT		28	154.3

PDMA = Provincial DisasterManagement Authority, PID = Punjab Irrigation Department. \*refers to Haveli, Kotli and Poonch districts.

These consultants will provide technical support for implementation of DRM component both in Punjab Province and Haveli, Kotli and Poonch districts. Their outline terms of reference are provided in the following paras.

# A. Provincial Disaster Management Authority

**GIS and Remote Sensing Expert.** (National, 12 person-months). The GIS expert will have Master's degree in GIS, Computer Science or any related field with at least 10 years' experience in mapping, remote sensing, using GIS application - most importantly application for Raster Analyst and Spatial Analyst Extensions and photogrammetry tools independently. The consultant will provide technical support to the GIS/Remote Sensing Specialist of PDMA in; (i) process modeling and designing a spatial solution for PDMA, (ii) handling spatial data and GIS application development, (iii) remote sensing procedures, and (iv) quality control during application development.

The consultant will produce the business process modeling document, and requirement specification and function specification document.

**Hydro-Meteorologist.** (National, 4 person-months). The Hydro-Meteorologist will have Master's degree in Geology, Meteorology, Hydrological engineering, Geography and Environmental Sciences, with at least 10 years of professional experience in the field of flood hazard assessment and modeling or any field relevant to hydro-meteorology, will have proven knowledge of GIS/RS and can run software to derive different model based on return period

The Hydro-Meteorologist will; (i) supervise muilti-hazard vulnerability and risk assessment (MHVRA) team in data collection, compilation and database development for flood & hydrological modeling, (ii) select variables like rainfall, peak discharge, flow volume & depth and best methods & protocols, (iii) carry out analysis of rainfall and run-off to determine a range of return period for different flood events, (iv) provide resource inputs in developing flood hazard and risk zonation mapping for the target project area, (v) deliver trainings/workshops related to flood modeling and risk assessment, and (vi) produce report on flood data collection, modeling & scenarios development methodologies, key findings and recommendations. The outputs under the assignment will include, (i) compiled meta database & catalogue of flood disasters, (ii) flood models based on different scenarios, (iii) flood hazard, vulnerability and risk profiling and mapping, and (iv) trainings courses report relevant to flood modeling and MHVRA

**Seismologist.**(National, 4 person-months).The Seismologist will have Master's degree in Geology, Seismology, or any other related field, with a minimum of 10 years of professional experience in seismic hazard assessment, and also proven knowledge of GIS/RS and ability to run modulation software.

The Seismologist) will; (i) supervise MHVRA team in seismic data collection, compilation and database development for seismic hazard, (ii) develop classified earthquake hazard maps at different scales with different return periods, (iii) select variables, design data format for data collection for earthquake hazard assessment, (iv) deliver trainings/workshops on seismic hazard and risk assessment, and (v) write technical report on development of hazard maps and database, with key findings and recommendations. The Seismologist will produce; (i) meta database & catalogue of seismic hazards, (ii) seismic hazard profiling and mapping, and (iii) trainings courses report relevant to seismic modeling and MHVRA.

**Sector Specialists (Four).** (National, for a total of 16 person-months) The Sector Specialists will have a university degree preferably Masters in related discipline with a minimum of 5 years sector experience. The sector specialists will work closely with other DRM Consultants in PDMA and provide sector input for the Multi-hazards Vulnerability Risk Assessment (MHVRA). The expected output of the Sector Specialists will be sectoral contribution in the MHVRA.

**Training Modules Development and Facilitation Specialist.** (National, 12 person-months). The Specialist is required to have a Master's degree in Disaster Management, Social Sciences, Geology, Geography, or Environmental Sciences with at least 10 years of professional experience in curriculum development and experience in designing and delivering training programs specifically on MHVRA and DRM, proficiency in report writing and experience in translating Urdu-English-Urdu material

The Specialist will; (i) design table of contents for different modules, (ii) develop English/Urdu version curriculum, training toolkit, (iii) involve in regular up-gradation and add new topics and

case studies to the curriculum, (iv) organize Training of Trainers courses and facilitate training sessions, (v) develop simulation exercises and hands on exercises, and (vi) conduct Training Needs/Impacts assessment for different courses. The output of the assignments will be; (i) standardized curriculum for MHVRA related trainings, (ii) training toolkit including participants workbook, trainer's guidebook, PPT slides, simulation, hands on exercises and case studies etc., and (iii) standard formats for monitoring and evaluating of different courses, pre/post course assessment, TNA and TIA formats

# B. Irrigation Department – (DRM Component)

**Hydraulic structure Expert.** (International, 4 person-months). The Expert will have a Master's degree in Civil engineering With specialization in Hydraulics/Hydraulics engineering. A PhD Hydraulics engineering or relevant field will be preferred. The expert will have general experience of 25 years in Design, Construction and Operation of major Hydraulic structures and a minimum of 10 years' experience in; (i) nondestructive testing of the hydraulic structures, (ii) safety Evaluation of hydraulic structures, (iii) diagnostic Analysis of the safety evaluation observations, (iv) Implementation of hydraulics and structural safety solutions, (v) preparation of Safety Evaluation Protocol/Guidelines, and (vi) development of asset management plan.

The Expert will; (i) review the existing documents of safety evaluation procedures of irrigation department, develop protocol and mandate for the safety evaluation authority (SEA) in irrigation department, (ii) propose the structure of the SAE and develop detailed terms of reference of the staff, (iii) prepare methodology for diagnostic analysis of safety evaluation and develop stand operating procedures for inspection and safety evaluation, (iv) work out and propose requirement of tools and equipment being used internationally for monitoring the health of hydraulic structures, and prepare specifications and bidding documents, and (v) help SEA develop linkages with international organizations like US Bureau of Reclamation, US Army Corps of Engineers, DELFT Institute of Hydraulics Netherlands, Wallingford Institute of Hydraulic Modeling England, for continuous updating of the safety protocols The output will be; a report on the mandate, organizational setup, and terms of reference of the staff of SEA, (ii) methodology, and standard operating procedures for inspection and safety evaluation, (iii) proposal on safety equipment to be procured for safety inspection and evaluation and prepare specifications as well as bidding documents.

**Dams Expert.** (International, 4 person-months). The Expert will have Master's degree in Civil Engineering, Geotech Engineering, or any other relevant discipline with at least 25 years in Design, Construction and Operation of major Hydraulic structures and a minimum of 10 years' experience in; (i) nondestructive testing of the hydraulic structures, (ii) safety Evaluation of hydraulic structures, (iii) diagnostic Analysis of the safety evaluation observations, (iv) Implementation of hydraulics and structural safety solutions, (v) preparation of Safety Evaluation Protocol/Guidelines, and (vi) development of asset management plan, and (vi) subsurface and foundation investigation of dams/ hydraulic structures

The Expert will; (i) review the existing documents of safety evaluation procedures of irrigation department, develop protocol and mandate for the safety evaluation authority (SEA) in irrigation department, (ii) propose the structure of the SAE and develop detailed terms of reference of the staff, (iii) prepare methodology for diagnostic analysis of safety evaluation observations and subsequent implementation of solutions, and develop stand operating procedures for inspection and safety evaluation, (iv) work out and propose requirement of tools and equipment being used internationally for monitoring the health of hydraulic structures, and prepare specifications and

bidding documents, and (v) help SEA develop linkages with relevant international organizations. The output will be; a report on the mandate, organizational setup, and terms of reference of the staff of SEA, (ii) methodology, and standard operating procedures for inspection and safety evaluation, (iii) proposal on safety equipment to be procured for safety inspection and evaluation and prepare specifications as well as bidding documents.

**Hydraulic Structure Expert.** (National, 4 person-months). The Expert will have a Master's degree in Civil engineering With specialization in Hydraulics/Hydraulics engineering. The expert will have a minimum of 10 years' experience in; (i) nondestructive testing of the hydraulic structures, (ii) safety Evaluation of hydraulic structures, (iii) diagnostic Analysis of the safety evaluation observations, (iv) Implementation of hydraulics and structural safety solutions, and (v) and preparation of Safety Evaluation Protocol/Guidelines, and (vi) development of asset management plan.

The Expert will work in collaboration with the International Hydraulic Expert and jointly carryout all tasks as detailed in the task list of the International Hydraulic Expert. The Expert with produce a report containing outcomes of the tasks performed during the duration of assignment. The expert will produce a report containing outcomes of the tasks performed during the duration of assignment.

**Dams Expert.** (National, 4 person-months). The Expert will have a Master's degree in Civil engineering With specialization in Hydraulics/Hydraulics engineering. The expert will have a minimum of 10 years' experience in; (i) non destructive testing of the hydraulic structures, (ii) safety Evaluation of hydraulic structures, (iii) diagnostic Analysis of the safety evaluation observations, (iv) Implementation of hydraulics and structural safety solutions, (v) preparation of Safety Evaluation Protocol/Guidelines, and (vi) development of asset management plan, and (vi) subsurface and foundation investigation of dams/ hydraulic structures

The Expert will work in collaboration with the International Dams Expert and jointly carryout all tasks as detailed in the task list of the International Dams Expert. The Expert will produce a report containing outcomes of the tasks performed during the duration of assignment.

**DRM Specialist.** (National, 4 person-months). The DRM Specialist will have Master's degree in social sciences, geology, geography, environmental sciences, disaster management or development studies with at least 10 years of professional experience in the implementation of DRR related project.

The Specialist will (i) conduct risk assessment of the different irrigation related project and develop report as per standard methodology developed by the PIU for risk assessment related studies, (ii) regular monitoring through field visits to ensure integration of DRM into project planning, (iii) develop training module/sessions on mainstreaming DRR into irrigation and agriculture sectors, and (iv) arrange trainings for technical and field team on DRM and mainstreaming DRR into irrigation and agriculture sectors. The key output will be ; (i) risk Assessment of the irrigation and agriculture related projects, and (ii) trainings courses relevant to DRM and its mainstreaming.

**Network Specialist.** (National, 12 person-months). The Network Specialist will have a Bachelor degree in Software Engineering, Information Systems, Information Technology, or any other related field, along with CCNA, CCNP and/or MCSE certification. The Network Specialist

will have; (i) a minimum of 5 years of relevant experience in handling large networks and have sound knowledge of communications and networking essentials.

The Network Administrator will: (i) review, design and develop network model using standard diagrams in conjunction with system designers and developers, (ii) Install, configure and test different server, (iii) deploy and test updates, patches, new modules and applications, (iv) monitor and administer server and user level security, and (v) ensure online availability of application. The outputs of Network Specialist will be; (i) reports regarding network design, (ii) implementation of working network and VPN, (iii) server backup and recovery, and (iv) availability of network and associated servers 24/7.

**GIS Specialist.** (National, 4 person-months). The Specialist will have a Master degree in Geography, Geology, information technology or related fields with at least 7 years' experience in mapping, remote sensing, using GIS application - most importantly application for Raster Analyst and Spatial Analyst Extensions and photogrammetry tools independently.

The GIS Specialist will; (i) do the process modeling and design a spatial solution for Irrigation Department, (ii) provide technical assistance in spatial data handling and GIS application development, (iii) imparting trainings, and (iv) quality control during application development and provide Technical Assistance in integration of distract-based GIS and its linkage to P&DD. The GIS specialist will contribute in producing the business process modeling document, and requirement specification and function specification document.

# C. Planning and Development Department (Haveli, Kotli and Poonch)

**Geologist.** (International, 2 person-months). The Geologist will have Master's degree in geology, geotechnical engineering, or any other relevant discipline with 10 years of experience on projects related to land degradation and slope stabilization management, including experience of geotechnical hazard and risk mapping, and bio-engineering and engineering solution of the landslide treatment.

The Geologist (International) will (i) support the forest department in all geological, geotechnical and geomorphological analyses relevant to landslide risk assessment, planning and mitigation, (ii) undertake landslide, mudflow and fluvial geomorphology surveys and develop landslide hazard and risk assessment mapping and profiling of all active landslide identified by Forest department, (iii) help in production of landslide and mudflow risk assessment guidance, duties and responsibilities, and (iv) promote, guide and share best practices relevant to landslide risk assessment, prevention and mitigation. The outputs will include; (i) geological, geotechnical and geomorphological surveys reports, (ii) landslide hazard and risk assessment, and (iv) detailed inventory of active landslides

**Geologist.** (National, 6 person-months). The Geologist will have Master's degree in geology, geotechnical engineering, or any other relevant discipline with 5 years of experience on projects related to land degradation and slope stabilization management, including experience of geotechnical hazard and risk mapping, and bio-engineering and engineering solution of the landslide treatment.

The Geologist (National) will; (i) work with the International Geologist for the assessment of landslide risk, planning and propose landslide mitigation measures, (ii) support the lead

Geologist in all geological/geotechnical and geomorphological surveys and analyses, (iii) undertake landslide, mudflow and fluvial geomorphology surveys and develop landslide hazard and risk assessment mapping and profiling, and (iv) support Lead Geologist in all tasks mentioned in his terms of reference. The outputs will include; (i) geological, geotechnical and geomorphological surveys reports, (ii) landslide hazard and risk assessment profiling and mapping, (iii) standard guiding tools for landslide and mudflow risk assessment, and (iv) detailed inventory of active landslides

**Climate Change Specialist.** (International, 40 person-days). The Climate Change Specialist shall have an advanced university degree preferably PhD in Natural Resources Management, Climatology or related climate change disciplines with research qualifications. A minimum, 15 years of work experience in senior management or supervisory roles of environmental and climate change related institution or projects is required. Working knowledge of climate change policy issues and challenges in Pakistan particularly of hilly terrains and strong analytical skills, particularly applied to climate change profiling are also required. The specialist is expected to be technically updated in the area of climate change modeling and risk assessment.

The Specialist will; (i) study and evaluate available literature, relevant documents related to the development of Climate Change Strategy and Action Plans from other countries as well as national information on sectoral climate change adaptation and mitigation interventions, communications and awareness programmes, capacity building, research and development, and climate change governance, (ii) develop a draft Regional Climate Change Strategy and Action Plan following UNFCCC guidelines and in line with Pakistan's Vision 2025 for Economic Growth and Prosperity, detailing specific activities, implementing institutions, time frame and estimated costs and resource requirements for priority activities, (iii) Identify financial resources that could be mobilized for implementation of the Strategy and Action Plan, targeting domestic resources as well as international funding agencies and development partners particularly for priority activities, and (iv) develop a monitoring and evaluation strategy to ensure effective implementation of the Strategy and Action Plan. The Consultant will; (i) prepare the draft Regional Climate Change Strategy and Action Plan, (ii) act as a resource person during a validation meeting of the draft Regional Climate Change Strategy and Action Plan and integrate comments provided during the meeting into the final draft, and (iii) submit the final Climate Change Strategy and Action Plan to the Additional Chief Secretary Development within a month after the validation meeting.

**Forestry Specialists.** (National Two persons for a total of 36 person-months). The Forestry Specialist will have advanced degree in Environmental Sciences, Forestry, Natural Resource Management or relevant field having a least 15 years of experience and a proven track record of working in Sustainable Forest Management/REDD+. The Specialists will have a deep knowledge about the climate change and environmental issues especially with reference to Sustainable Forest Management, REDD/REDD+, Natural Resource Management;

The Forestry Specialists will; (i) identify the gaps between the existing forestry practices and suggest the measures and plan to convert the existing practices in line with REDD+ implementation mechanism, (ii) devise strategy to improve / adapt the existing forestry practices for achievement of REDD+ mechanism with the such local initiatives which are in line with the national priorities and global commitments, (iii) synchronize the proposed local initiatives with the already taken initiatives at national level in synergetic way to avoid duplication and ensure efficient out puts and out comes, (iv) assist Ministry of Climate Change in quantifying the  $CO_2$  emissions in region that could be avoided by the REDD+ mechanism, (v) work closely with

national focal point on forest reference and reference emission levels and Safeguards Information Systems (SIS), (vi) develop awareness material for public and stakeholders, (vii) develop the methodologies for carbon stock monitoring, reporting and verification in line with UN-REDD and IPCC guidelines so that the existing methodologies are improved / restructured for the purpose, (viii) develop and support CCC in implementation of potential REDD+ pilot projects/activities in region, in coordination with Forest Department, that are measureable, quantifiable, in accordance with the standards set at the national and international level, (ix) provide support to the CCC P&DD, Apex forest department and other stakeholders in training, awareness raising and other capacity building activities related with REDD+ and climate change initiatives, (x) analyze the existing legal framework and propose amendments where necessary to provide an enabling atmosphere for the implementation of REDD+ mechanism in region, (xi) ensue that CCU efforts complement the ongoing MoCC, UNDP and WB initiatives and there are no duplications and redundancies, (xii) identify Suitable sites for starting SFM on pilot and demonstration basis, and (xiii) provide support to the Forest Department in preparation of a model Sustainable Forest Management Plan

Main outputs of Forestry Specialists are; (i) model sustainable forest management plan, (ii) proposed amendments in legal framework to facilitate implementation of REDD+ mechanism in region, (iii) REDD+ pilot projects for region, (iv) report on improving methodologies for carbon stock monitoring, reporting and verification in line with UN-REDD and IPCC guidelines, (iv) awareness material for public and stakeholders, and (v) a report on strategy to improve / adapt the existing forestry practices for achievement of REDD+ mechanism with the local initiatives that are in line with the national priorities and global commitments;

**Research Associates (Two).** (National, for a total of 80 person days). The Research Associates will have university degree preferably Masters in Natural Resources Management, Environmental Policy & Planning, Climatology or related climate change disciplines and have a minimum of three years of work experience in environmental and climate change related institution or projects. Working knowledge of climate change issues and challenges in Pakistan particularly of hilly terrain desirable.

The Climate Change Research Associates will; (i) study and evaluate available literature, relevant documents related to the development of Climate Change Strategy and Action Plans from other countries as well as national information on sectoral climate change adaptation and mitigation interventions, communications and awareness programmes, capacity building, research and development, and climate change governance, (ii) assist Team in the development of a draft Regional Climate Change Strategy and Action Plan, (iii) assist in Identifying the financial resources for implementation of the Strategy and Action Plan, and (iv) assist in developing a monitoring and evaluation strategy for effective implementation of the Climate Change Strategy and Action Plan. The expected outputs of the Consultants team (Climate Change Strategy and Action Plan, (ii) resource persons during a validation meeting of the draft Regional Climate Change Strategy and Action Plan, (ii) resource persons during a validation meeting of the draft Regional Climate Change Strategy and Action Plan, (ii) the final Climate Change Strategy and Action Plan, (ii) resource persons during a validation meeting of the draft Regional Climate Change Strategy and Action Plan, (ii) the final Climate Change Strategy and Action Plan document

**Sector Specialists for Climate-Change Cell (Six).** (National, for a total of 240 person-days or 10.9 person months) The Sector Specialists will have a university degree preferably Masters in related discipline with a minimum of 5 years sector experience. The sector specialists will work closely with the Climate-Change Expert and provide technical input related to their respective

sectors in drafting of the Climate-Change Policy and action plan. The expected output of the Sector Specialists will be contribution in the draft climate change policy.

**Website Developer.** (National, 10 person-months). The Website development will have at least a Bachelor degree in Computer Sciences or equivalent with a minimum of least 5 years' experience and a proven track record in website design, graphic design, social media integration, branding and communication The Website Developer will have a portfolio of atleast 30 previously developed websites.

The Website Developer will create a design for the website of the Climate-Change Cell in P&D responsible for Haveli, Kotli and Poonch districts acceptable to the client, and develop website that will have; (i) an interactive and appealing web design, (ii) document management system, (iii) Photo & Video Bank, (iv) blogs and discussion forums, (v) customized and automated archival of documents, articles, data, video, discussions, polls, survey etc., and (vi) Email alerts for members (fortnightly, monthly, customized based on their preference of info / frequency). The Consultant will also provide training to the designated staff of the P&D for maintenance of the website.The output of the Website Developer will be an up and running website of the Climate-change Cell, and complete documentation of the final application including source code, installation and updating guide, and standard operating procedures.

# National Resettlement Specialist C&W Punjab

# **Terms of Reference**

#### **Background Information**

In response to the effects of the 2014 flood in Punjab Province and Haveli, Kotli and Poonch districts, ADB is preparing a Flood Emergency Reconstruction and Resilience Project (FERRP) and is assisting the Government of Pakistan to establish a disaster risk management fund. The loan-financed project will contribute to the economic and social recovery of flood-affected areas through the restoration and reconstruction of critical infrastructure to safer standards. The scope of the proposed project includes: (i) Rehabilitation and reconstruction of flood damaged roads and bridges; (ii) rehabilitation and reconstruction of damaged irrigation, drainage and flood protection schemes, and upgrading of priority flood protection schemes; and (iii) strengthening disaster risk management through: (a) human and institutional capacity development and strengthening the interface with the districts (downward) and other mandated institutions (horizontal and upwards) that have a key role in flood management; and, (b) multi-hazard risk assessment data and system development. The Disaster Risk Management Fund (the Fund) will address ex ante and ex post disaster management, and enhance Pakistan's resilience to future natural hazards/disaster events.

### Scope of Work

The project intends to engage a full time Resettlement Specialist (consultant) to the roads and bridges component to be implemented by the Communications and Works Department (C&W) of the Government of Punjab. The C&W component in Punjab includes multiple provincial and district roads and bridges and will involve retroactive financing (emergency restoration works; completed and ongoing) and financing for works to be procured. The consultant will work closely with EA/IA's team of engineering and social and environment experts to conduct due diligence reviews of subprojects for retroactive financing and new construction in light of ADB's Safeguard Policy Statement 2009 (SPS). Based on the due diligence work, consultant will also assist the EA/IA in preparation, implementation and monitoring of resettlement plans. The focus of work will be on the involuntary resettlement and indigenous people's policy; objectives, principles and implementation procedures. The consultant will spend 80% of the time in the field (based at C&W office in Lahore) and the remainder 20% in Islamabad at PRM.

#### **Detailed Tasks**

The consultant will:

Review the design and make recommendations as appropriate to minimize or avoid land acquisition and resettlement (LAR) impacts.

- (i) Prepare IR and IP checklist of subprojects (with completed and ongoing emergency restoration works) for retroactive financing and sections of subprojects requiring new construction.
- (ii) Provide an orientation/training to EA/IA's staff and consultants IR and IPs polices and implementation/compliance requirement of ADB's SPS 2009.

- (iii) Prepare land acquisition and resettlement plans (LARPs) in accordance with the land acquisition and resettlement framework (LARF) of the project, SPS 2009 and Pakistan's Land Acquisition Act of 1894.
- (iv) Ensure all aspects for compensation and assistance for livelihood restoration and improvement are identified and included in the LARPs.
- (v) Identify land and non-land impacts, based on the RoW markers, with support from EA/IA's engineering and safeguards team and revenue staff. Complete a census of displaced parsons (DPs) and inventory of losses. Conduct a social survey of the displaced population to establish the social and economic baseline and assess the social impact of the project. The survey will include, sex disaggregated data, define and identify vulnerable households.
- (vi) Conduct stakeholder analysis and ensure meaningful consultations are conducted with all DPs (men and women) and other key stakeholders including civil society organizations.
- (vii) Document consultations, issues raised and make recommendations to incorporate concerns either in engineering designs or for inclusion in the LARPs
- (viii) Ensure compensation assessments are at full replacement costs and engage in early discussions with revenue staff to ensure current price assessments.
- (ix) Support C&W in ensuring all compensation and resettlement assistance is paid to DPs before dispossession/construction startup.
- (x) Contribute towards the regular monitoring reports by providing relevant information on resettlement information.
- (xi) Given the limited time for project completion, LARPs should be implementation ready. Ensure all actions and institutional arrangements have been identified and put in to implement LARPs. Organize consultations between C&W and partner agencies in the province for implementing LARPs and identify support required to expedite implementation of the LARP. Include and cost these requirements in the LARP.
- (xii) Ensure LARP, monitoring reports and any corrective action plans (CAPs) are disclosed to the DPs in accordance with guidance provided in the SPS.
- (xiii) Assist C&W in implementing the grievance redress mechanism and timely resolution of grievances or complaints, if any.
- (xiv) Prepare an outline for internal monitoring and submit internal monitoring reports to ADB and NHA on a quarterly basis or on a case by case basis depending on construction schedules.
- (xv) Prepare corrective action plans (CAPs) based on the monitoring reports.
- (xvi) Maintain a complete computerized database of all documents and information.
- (xvii) All activities will be undertaken in coordination with C&W's focal point and the project directors and PMU staff.
- (xviii) Any other tasks assigned by the project officer

# Outputs

The consultant's main outputs will be preparation of LARPs including IR and IPs checklists and CAPs (if any) and monitoring reports;

### **Duration of Assignment**

The assignment will be for 2 years full time work or 24 persons months extendable to 36 person months, if required.

#### Experience/Qualification

The consultant will have a Master's degree in social sciences with 5-10 years of full time or consultancy work experience as resettlement specialist and/or resettlement monitoring specialist. Full familiarity with and implementation experience of ADB's SPS 2009; IR and IPs policy and implementation procedures, and Pakistan's land acquisition act 1894 is a must.

### **Reporting Line**

The consultant will report to the Project Team Leader (Principal Natural Resources and Agriculture Specialist) and the Senior Safeguards Officer of ADB based at Pakistan Resident Mission (PRM) in Islamabad.

#### **Duty Station**

The duty stations are; C&W Department Lahore (80% person months) and PRM (20% person months) Islamabad.

# National Resettlement Specialist – Punjab Irrigation Department Lahore

# Terms of Reference

#### Background Information

In response to the effects of the 2014 flood in Punjab Province and Haveli, Kotli and Poonch districts, ADB is preparing a Flood Emergency Reconstruction Project (FERP) and is assisting the Government of Pakistan to establish a disaster risk management fund. The loan-financed project will contribute to the economic and social recovery of flood-affected areas through the restoration and reconstruction of critical infrastructure to safer standards. The scope of the proposed project includes: (i) Rehabilitation and reconstruction of flood damaged roads and bridges; (ii) rehabilitation and reconstruction of damaged irrigation, drainage and flood protection schemes, and upgrading of priority flood protection schemes; and (iii) strengthening disaster risk management through: (a) human and institutional capacity development and strengthening the interface with the districts (downward) and other mandated institutions (horizontal and upwards) that have a key role in flood management; and, (b) multi-hazard risk assessment data and system development. The Disaster Risk Management Fund (the Fund) will address ex ante and ex post disaster management, and enhance Pakistan's resilience to future natural hazards/disaster events.

#### Scope of Work

The project intends to engage a full time Resettlement Specialist (consultant) to the roads and bridges component to be implemented by the Punjab Irrigation Department (PID) of the Government of Punjab (GoPb) The PID component of the project in Punjab includes multiple provincial and district roads and bridges and involve retroactive financing of the complement and ongoing emergency restoration works and financing for inescapable works to be procured. The consultant will work closely with EA/IA's team of engineering and social and environment experts to conduct due diligence reviews of subprojects in light of ADB's Safeguard Policy Statement 2009 (SPS). Based on the due diligence work, consultant will also assist in preparation, implementation and monitoring of resettlement plans. The focus of work will be on the involuntary resettlement and indigenous people's policy; objectives, principles and implementation procedures. The consultant will spend 80% of the time in the field (based at C&W office in Lahore) and the remainder 20% in Islamabad at PRM.

#### Detailed Tasks

The consultant will:

- (i) Review the design and make recommendations as appropriate to minimize or avoid land acquisition and resettlement (LAR) impacts.
- (ii) Prepare IR and IP checklist of subprojects (with completed and ongoing emergency restoration works) for retroactive financing for inescapable works.
- (iii) Provide an orientation/training to EA/IA's (P&DD and PID) staff and consultants on IR and IPs polices and SPS implementation and compliance requirements. Prepare land acquisition and resettlement plans (LARPs) in accordance with the land acquisition and resettlement framework (LARF) of the project, SPS 2009 and Pakistan's Land Acquisition Act of 1894.

- (iv) Ensure all aspects for compensation and assistance for livelihood restoration and improvement are identified and included in the LARPs.
- (v) Identify land and non-land impacts, based on the RoW markers, with support from EA/IA's engineering and safeguards team and revenue staff. Complete a census of displaced parsons (DPs) and inventory of losses. Conduct a social survey of the displaced population to establish the social and economic baseline and assess the social impact of the project. The survey will include, sex disaggregated data, define and identify vulnerable households.
- (vi) Conduct stakeholder analysis and ensure meaningful consultations are conducted with all DPs (men and women) and other key stakeholders including civil society organizations.
- (vii) Document consultations, issues raised and make recommendations to incorporate concerns either in engineering designs or for inclusion in the LARPs
- (viii) Ensure compensation assessments are at full replacement costs and engage in early discussions with revenue staff to ensure current price assessments.
- (ix) Support PID in ensuring all compensation and resettlement assistance is paid to DPs before dispossession/construction startup.
- (x) Contribute towards the regular monitoring reports by providing relevant information on resettlement information.
- (xi) Given the limited time for project completion, LARPs should be implementation ready. Ensure all actions and institutional arrangements have been identified and put in to implement LARPs. Organize consultations between C&W and partner agencies in the province for implementing LARPs and identify support required to expedite implementation of the LARP. Include and cost these requirements in the LARP.
- (xii) Ensure LARP, monitoring reports and any corrective action plans (CAPs) are disclosed to the DPs in accordance with guidance provided in the SPS.
- (xiii) Assist C&W in implementing the grievance redress mechanism and timely resolution of grievances or complaints, if any.
- (xiv) Prepare an outline for internal monitoring and submit internal monitoring reports to ADB and NHA on a quarterly basis or on a case by case basis depending on construction schedules.
- (xv) Prepare corrective action plans (CAPs) based on the monitoring reports.
- (xvi) Maintain a complete computerized database of all documents and information.
- (xvii) All activities will be undertaken in coordination with PID's focal point and the project directors and PMU staff.
- (xviii) Any other tasks assigned by the project officer

# Outputs

The consultant's main outputs will be preparation of LARPs including IR and IPs checklists and CAPs (if any) and monitoring reports;

# **Duration of Assignment**

The assignment will be for 2 years full time work or 24 person months extendable to 36 person months, if required.

#### Experience/Qualification

The consultant will have a Master's degree in social sciences with 5-10 years of full time or consultancy work experience as resettlement specialist and/or resettlement monitoring specialist. Full familiarity with and implementation experience of ADB's SPS 2009; IR and IPs policy and implementation procedures, and Pakistan's land acquisition act 1894 is a must.

#### **Reporting Line**

The consultant will report to the Project Team Leader (Principal Natural Resources and Agriculture Specialist) and the Senior Safeguards Officer of ADB based at Pakistan Resident Mission (PRM) in Islamabad.

#### **Duty Station**

The duty stations are; PID Department Lahore (80% person months) and PRM (20% person months) Islamabad.

# National Resettlement Specialist –C&W Department (Haveli, Kotli and Poonch)

### **Terms of Reference**

#### **Background Information**

The project will contribute to the economic and social recovery of flood-affected areas through the restoration and reconstruction of critical infrastructure to safer standards. The scope of the proposed project includes: (i) Rehabilitation and reconstruction of flood damaged roads and bridges; (ii) rehabilitation and reconstruction of damaged irrigation, drainage and flood protection schemes, and upgrading of priority flood protection schemes; and (iii) strengthening disaster risk management through: (a) human and institutional capacity development and strengthening the interface with the districts (downward) and other mandated institutions (horizontal and upwards) that have a key role in flood management; and, (b) multi-hazard risk assessment data and system development. The Disaster Risk Management Fund (the Fund) will address ex ante and ex post disaster management, and enhance Pakistan's resilience to future natural hazards/disaster events.

#### Scope of Work

The project intends to engage a full time Resettlement Specialist (consultant) to the roads and bridges component to be implemented by the Communications and Works Department (C&W). The C&W component of the project includes multiple district roads and bridges involving financing for works to be procured. The consultant will work closely with EA/IA's team of engineering and social and environment experts to conduct due diligence reviews of subprojects for retroactive financing and new construction in light of ADB's Safeguard Policy Statement 2009 (SPS). Based on the due diligence work, consultant will also assist the EA/IA in preparation, implementation and monitoring of resettlement plans. The focus of work will be on the involuntary resettlement and indigenous people's policy; objectives, principles and implementation procedures. The consultant will spend 80% of the time in the field (based at C&W office) and the remainder 20% in Islamabad at PRM.

#### **Detailed Tasks**

The consultant will:

- (i) Review the design and make recommendations as appropriate to minimize or avoid land acquisition and resettlement (LAR) impacts.
- (ii) Prepare IR and IP checklist of subprojects (with completed and ongoing emergency restoration works) for retroactive financing and sections of subprojects requiring new construction.
- (iii) Provide an orientation/training to EA/IA's staff and consultants IR and IPs polices and implementation/compliance requirement of ADB's SPS 2009.
- (iv) Prepare land acquisition and resettlement plans (LARPs) in accordance with the land acquisition and resettlement framework (LARF) of the project, SPS 2009 and Pakistan's Land Acquisition Act of 1894.
- (v) Ensure all aspects for compensation and assistance for livelihood restoration and improvement are identified and included in the LARPs.

- (vi) Identify land and non-land impacts, based on the RoW markers, with support from EA/IA's engineering and safeguards team and revenue staff. Complete a census of displaced parsons (DPs) and inventory of losses. Conduct a social survey of the displaced population to establish the social and economic baseline and assess the social impact of the project. The survey will include, sex disaggregated data, define and identify vulnerable households.
- (vii) Conduct stakeholder analysis and ensure meaningful consultations are conducted with all DPs (men and women) and other key stakeholders including civil society organizations.
- (viii) Document consultations, issues raised and make recommendations to incorporate concerns either in engineering designs or for inclusion in the LARPs
- (ix) Ensure compensation assessments are at full replacement costs and engage in early discussions with revenue staff to ensure current price assessments.
- (x) Support C&W in ensuring all compensation and resettlement assistance is paid to DPs before dispossession/construction startup.
- (xi) Contribute towards the regular monitoring reports by providing relevant information on resettlement information.
- (xii) Given the limited time for project completion, LARPs should be implementation ready. Ensure all actions and institutional arrangements have been identified and put in to implement LARPs. Organize consultations between C&W and partner agencies in the province for implementing LARPs and identify support required to expedite implementation of the LARP. Include and cost these requirements in the LARP.
- (xiii) Ensure LARP, monitoring reports and any corrective action plans (CAPs) are disclosed to the DPs in accordance with guidance provided in the SPS.
- (xiv) Assist C&W in implementing the grievance redress mechanism and timely resolution of grievances or complaints, if any.
- (xv) Prepare an outline for internal monitoring and submit internal monitoring reports to ADB and NHA on a quarterly basis or on a case by case basis depending on construction schedules.
- (xvi) Prepare corrective action plans (CAPs) based on the monitoring reports.
- (xvii) Maintain a complete computerized database of all documents and information.
- (xviii) All activities will be undertaken in coordination with C&W's focal point and the project directors and PMU staff.
- (xix) Any other tasks assigned by the project officer

# Outputs

The consultant's main outputs will be preparation of LARPs including IR and IPs checklists and CAPs (if any) and monitoring reports;

#### **Duration of Assignment**

The assignment will be for 2 years full time work or 24 person months extendable to 36 person months, if required.

#### Experience/Qualification

The consultant will have a Master's degree in social sciences with 5-10 years of full time or consultancy work experience as resettlement specialist and/or resettlement monitoring

specialist. Full familiarity with and implementation experience of ADB's SPS 2009; IR and IPs policy and implementation procedures, and Pakistan's land acquisition act 1894 is a must.

#### **Reporting Line**

The consultant will report to the Project Team Leader (Principal Natural Resources and Agriculture Specialist) and the Senior Safeguards Officer of ADB based at Pakistan Resident Mission (PRM) in Islamabad.

#### **Duty Station**

The duty stations are Haveli, Kotli and Poonch districtsC&W Department (80% person months) and PRM (20% person months) Islamabad.
## Environment Specialist (National Consultant) Planning and Development Department (P&D), Punjab

## Terms of Reference

## **Objective/Purpose of Assignment**

The Flood Emergency Reconstruction and Resilience Project will support economic and social recovery in flood affected areas in Punjab province by financing the rehabilitation and reconstruction of priority infrastructure in multiple sectors with a focus on provincial and district roads and bridges, and irrigation, drainage and flood protection. Immediate start up support is needed and will be provided to implementing agencies through a Technical Assistance (TA).

The Environment Specialist will support the Project Coordination Unit (PCU) established at the Planning and Development Department (P&DD) Punjab, and the Project Implementation Units (PIUs) established in the Punjab Irrigation Department (PID) and Communication and Works (C&W) Department, Punjab to ensure compliance with:

- National and provincial environmental legislation and requirements under Pakistan Environmental Protection Act (PEPA), 1997, and Punjab Environmental Protection Act, 1997 (Amended 2012);
- ADB's environmental safeguards as stipulated in Safeguard Policy Statement (SPS) 2009; and
- Conditions and criteria described in the Environmental Assessment and Review Framework (EARF) prepared for the project.

## Scope of Work

The Environment Specialist will provide technical support and assistance to the Project Coordination Unit (PCU) of P&DD, and the PIUs in PID and C&W Dept. Punjab in the preparation, implementation and monitoring of environmental safeguard related tasks and documentation for the subprojects under the PID and C&W Department, Punjab.

## **Detailed Tasks**

- (i) Prepare REA Checklists and classify sub-projects that have not been yet classified according to ADB's environmental categorization criteria.
- (ii) Based on the checklist and as per ADB SPS (2009) and Punjab Environmental Protection Act, 1997 (Amended 2012) requirements, prepare IEEs and Environmental Management Plans (EMP).
- (iii) Submit the IEE report and the review form to ADB as part of the approval process of subproject.
- (iv) Provide support to the Project Implementation Units (PIUs) at the PID and C&W Dept. for ensuring that EMPs are included in Tender documents.
- (v) Ensure that all regulatory clearances are obtained before starting civil works for the subproject.
- (vi) Ensure that the EMPs, including all proposed mitigation measures and monitoring programs are properly implemented.

- (vii) Support the PIUs at PID and C&W Dept. in monitoring of subprojects and preparation of Bi-annual Environmental Monitoring Reports on prescribed format, to be submitted to ADB.
- (viii) In the case of unpredicted environmental impacts occurring during project implementation, prepare and implement a Corrective Action Plan (CAP).
- (ix) In the case that a Category B subproject needs to have its siting or alignment changed or its environmental classification reconfirmed, review it to determine whether a supplementary study is required. If so, carry out the study and implement any amendments to the original EMP.
- (x) Ensure that meaningful public consultations (including both men and women) are undertaken with affected groups and local NGOs. The list of people attending the consultation, time and locations, subjects discussed during consultation are to be recorded in a systematic manner.
- (xi) Support the PIUs at PID and C&W Dept. in information sharing and disclosure of environmental safeguard documents (including any CAPs prepared in cases of change to original project design) as required.
- (xii) Provide training on environmental management, and health and safety aspects to project staff.
- (xiii) Support the PCU and PIUs at PID and C&W Dept. in any other tasks as may be required for ensuring compliance with the SPS 2009 on environmental safeguards.

# Outputs

The Environment Specialist will be responsible for preparing and submitting all environment related documentation including (but not limited to) the following documents/reports:

- REA Checklists for all subprojects
- Environmental assessment reports as required (IEE, EIA, EMP)
- Periodic environmental monitoring reports
- Corrective Action Plans where required

# Duration of Assignment

The Environment Specialist is expected to provide needs-based intermittent support of 9 person months over a period of 12 calendar months.

## **Qualifications and Experience**

Graduate degree in environmental engineering or post-graduate degree in environmental science or a related discipline is required with a minimum of 5 years of experience in environmental management and monitoring of projects, environmental assessment and/or design and implementation of environmental mitigation measures.

## Reporting

The Environment Specialist will report to the Project Team Leader, ADB Pakistan Resident Mission.

# **Duty Station**

The Environment Specialist will be based in PCU, P&DD Punjab in Lahore.

## Environment Specialist (National Consultant) Communication and Works (C&W) Department for Haveli, Kotli and Poonch districts, Terms of Reference

## **Objective/Purpose of Assignment**

The Flood Emergency Reconstruction and Resilience Project will support economic and social recovery in flood affected areas in Haveli, Kotli and Poonch districts by financing the rehabilitation and reconstruction of roads (and bridges). Immediate start up support is needed and will be provided to implementing agencies through a Technical Assistance (TA).

The Environment Specialist will support the Project Implementation Unit (PIU) established at the Communication and Works (C&W) Department for the districts of Haveli, Kotli and Poonch to ensure compliance with:

- National and local environmental legislation and requirements under Pakistan Environmental Protection Act (PEPA), 1997, and Haveli, Kotli and Poonch districts Environmental Protection Act, (2000);
- ADB's environmental safeguards as stipulated in Safeguard Policy Statement (SPS) 2009; and
- Conditions and criteria described in the Environmental Assessment and Review Framework (EARF) prepared for the project.

## Scope of Work

The Environment Specialist will provide technical support and assistance to the Project Implementation Unit (PIU) of the C&W Department in the preparation, implementation and monitoring of environmental safeguard related tasks and documentation for the subprojects.

## Detailed Tasks

- (i) Prepare REA Checklists and classify sub-projects that have not been yet classified according to ADB's environmental categorization criteria.
- (ii) Based on the checklist and as per ADB SPS (2009) and Environmental Protection Act, 2000 requirements, prepare IEEs and Environmental Management Plans (EMP).
- (iii) Submit the IEE report and the review form to ADB as part of the approval process of subproject.
- (iv) Provide support to the Project Implementation Unit (PIU) for ensuring that EMPs are included in Tender documents.
- (v) Ensure that all regulatory clearances are obtained before starting civil works for the subproject.
- (vi) Ensure that the EMPs, including all proposed mitigation measures and monitoring programs are properly implemented.
- (vii) Support the PIU in monitoring of subprojects and preparation of Bi-annual Environmental Monitoring Reports on prescribed format, to be submitted to ADB.
- (viii) In the case of unpredicted environmental impacts occurring during project implementation, prepare and implement a Corrective Action Plan (CAP).
- (ix) In the case that a Category B subproject needs to have its siting or alignment changed or its environmental classification reconfirmed, review it to determine whether a

supplementary study is required. If so, carry out the study and implement any amendments to the original EMP.

- (x) Ensure that meaningful public consultations (including both men and women) are undertaken with affected groups and local NGOs. The list of people attending the consultation, time and locations, subjects discussed during consultation are to be recorded in a systematic manner.
- (xi) Support the PIU in information sharing and disclosure of environmental safeguard documents (including any CAPs prepared in cases of change to original project design) as required.
- (xii) Provide training on environmental management, and health and safety aspects to project staff.
- (xiii) Support the PIU at C&W Dept. in any other tasks as may be required for ensuring compliance with the SPS 2009 on environmental safeguards.

## Outputs

The Environment Specialist will be responsible for preparing and submitting all environment related documentation including (but not limited to) the following documents/reports:

- REA Checklists for all subprojects
- Environmental assessment reports as required (IEE, EIA, EMP)
- Periodic environmental monitoring reports
- Corrective Action Plans where required

## **Duration of Assignment**

The Environment Specialist is expected to provide needs-based intermittent support of 9 person months over a period of 12 calendar months.

## **Qualifications and Experience**

Graduate degree in environmental engineering or post-graduate degree in environmental science or a related discipline is required with a minimum of 5 years of experience in environmental management and monitoring of projects, environmental assessment and/or design and implementation of environmental mitigation measures.

## Reporting

The Environment Specialist will report to the Project Team Leader, ADB Pakistan Resident Mission.

## **Duty Station**

The Environment Specialist will be based in PIU, C&W Dept. in Muzaffarabad.

# National Resettlement Specialist C&W Punjab

# **Terms of Reference**

## **Background Information**

The project will contribute to the economic and social recovery of flood-affected areas through the restoration and reconstruction of critical infrastructure to safer standards. The scope of the proposed project includes: (i) Rehabilitation and reconstruction of flood damaged roads and bridges; (ii) rehabilitation and reconstruction of damaged irrigation, drainage and flood protection schemes, and upgrading of priority flood protection schemes; and (iii) strengthening disaster risk management through: (a) human and institutional capacity development and strengthening the interface with the districts (downward) and other mandated institutions (horizontal and upwards) that have a key role in flood management; and, (b) multi-hazard risk assessment data and system development.

## Scope of Work

The project intends to engage a full time Resettlement Specialist (consultant) to the roads and bridges component to be implemented by the Communications and Works Department (C&W) of the Government of Punjab. The C&W component in Punjab includes multiple provincial and district roads and bridges and will involve retroactive financing (emergency restoration works; completed and ongoing) and financing for works to be procured. The consultant will work closely with EA/IA's team of engineering and social and environment experts to conduct due diligence reviews of subprojects for retroactive financing and new construction in light of ADB's Safeguard Policy Statement 2009 (SPS). Based on the due diligence work, consultant will also assist the EA/IA in preparation, implementation and monitoring of resettlement plans. The focus of work will be on the involuntary resettlement and indigenous people's policy; objectives, principles and implementation procedures. The consultant will spend 80% of the time in the field (based at C&W office in Lahore) and the remainder 20% in Islamabad at PRM.

## **Detailed Tasks**

The consultant will:

Review the design and make recommendations as appropriate to minimize or avoid land acquisition and resettlement (LAR) impacts.

- (i) Prepare IR and IP checklist of subprojects (with completed and ongoing emergency restoration works) for retroactive financing and sections of subprojects requiring new construction.
- (ii) Provide an orientation/training to EA/IA's staff and consultants IR and IPs polices and implementation/compliance requirement of ADB's SPS 2009.
- (iii) Prepare land acquisition and resettlement plans (LARPs) in accordance with the land acquisition and resettlement framework (LARF) of the project, SPS 2009 and Pakistan's Land Acquisition Act of 1894.
- (iv) Ensure all aspects for compensation and assistance for livelihood restoration and improvement are identified and included in the LARPs.
- (v) Identify land and non-land impacts, based on the RoW markers, with support from EA/IA's engineering and safeguards team and revenue staff. Complete a census of

displaced parsons (DPs) and inventory of losses. Conduct a social survey of the displaced population to establish the social and economic baseline and assess the social impact of the project. The survey will include, sex disaggregated data, define and identify vulnerable households.

- (vi) Conduct stakeholder analysis and ensure meaningful consultations are conducted with all DPs (men and women) and other key stakeholders including civil society organizations.
- (vii) Document consultations, issues raised and make recommendations to incorporate concerns either in engineering designs or for inclusion in the LARPs
- (viii) Ensure compensation assessments are at full replacement costs and engage in early discussions with revenue staff to ensure current price assessments.
- (ix) Support C&W in ensuring all compensation and resettlement assistance is paid to DPs before dispossession/construction startup.
- (x) Contribute towards the regular monitoring reports by providing relevant information on resettlement information.
- (xi) Given the limited time for project completion, LARPs should be implementation ready. Ensure all actions and institutional arrangements have been identified and put in to implement LARPs. Organize consultations between C&W and partner agencies in the province for implementing LARPs and identify support required to expedite implementation of the LARP. Include and cost these requirements in the LARP.
- (xii) Ensure LARP, monitoring reports and any corrective action plans (CAPs) are disclosed to the DPs in accordance with guidance provided in the SPS.
- (xiii) Assist C&W in implementing the grievance redress mechanism and timely resolution of grievances or complaints, if any.
- (xiv) Prepare an outline for internal monitoring and submit internal monitoring reports to ADB and NHA on a quarterly basis or on a case by case basis depending on construction schedules.
- (xv) Prepare corrective action plans (CAPs) based on the monitoring reports.
- (xvi) Maintain a complete computerized database of all documents and information.
- (xvii) All activities will be undertaken in coordination with C&W's focal point and the project directors and PMU staff.
- (xviii) Any other tasks assigned by the project officer

# Outputs

The consultant's main outputs will be preparation of LARPs including IR and IPs checklists and CAPs (if any) and monitoring reports;

# **Duration of Assignment**

The assignment will be for 2 years full time work or 24 persons months extendable to 36 person months, if required.

# Experience/Qualification

The consultant will have a Master's degree in social sciences with 5-10 years of full time or consultancy work experience as resettlement specialist and/or resettlement monitoring specialist. Full familiarity with and implementation experience of ADB's SPS 2009; IR and IPs policy and implementation procedures, and Pakistan's land acquisition act 1894 is a must.

# **Reporting Line**

The consultant will report to the Project Team Leader (Principal Natural Resources and Agriculture Specialist) and the Senior Safeguards Officer of ADB based at Pakistan Resident Mission (PRM) in Islamabad.

# **Duty Station**

The duty stations are; C&W Department Lahore (80% person months) and PRM (20% person months) Islamabad.

# National Resettlement Specialist – Punjab Irrigation Department Lahore

## Terms of Reference

#### Background Information

The project will contribute to the economic and social recovery of flood-affected areas through the restoration and reconstruction of critical infrastructure to safer standards. The scope of the proposed project includes: (i) Rehabilitation and reconstruction of flood damaged roads and bridges; (ii) rehabilitation and reconstruction of damaged irrigation, drainage and flood protection schemes, and upgrading of priority flood protection schemes; and (iii) strengthening disaster risk management through: (a) human and institutional capacity development and strengthening the interface with the districts (downward) and other mandated institutions (horizontal and upwards) that have a key role in flood management; and, (b) multi-hazard risk assessment data and system development.

## Scope of Work

The project intends to engage a full time Resettlement Specialist (consultant) to the roads and bridges component to be implemented by the Punjab Irrigation Department (PID) of the Government of Punjab (GoPb) The PID component of the project in Punjab includes multiple provincial and district roads and bridges and involve retroactive financing of the complement and ongoing emergency restoration works and financing for inescapable works to be procured. The consultant will work closely with EA/IA's team of engineering and social and environment experts to conduct due diligence reviews of subprojects in light of ADB's Safeguard Policy Statement 2009 (SPS). Based on the due diligence work, consultant will also assist in preparation, implementation and monitoring of resettlement plans. The focus of work will be on the involuntary resettlement and indigenous people's policy; objectives, principles and implementation procedures. The consultant will spend 80% of the time in the field (based at C&W office in Lahore) and the remainder 20% in Islamabad at PRM.

## **Detailed Tasks**

The consultant will:

- (i) Review the design and make recommendations as appropriate to minimize or avoid land acquisition and resettlement (LAR) impacts.
- (ii) Prepare IR and IP checklist of subprojects (with completed and ongoing emergency restoration works) for retroactive financing for inescapable works.
- (iii) Provide an orientation/training to EA/IA's (P&DD and PID) staff and consultants on IR and IPs polices and SPS implementation and compliance requirements. Prepare land acquisition and resettlement plans (LARPs) in accordance with the land acquisition and resettlement framework (LARF) of the project, SPS 2009 and Pakistan's Land Acquisition Act of 1894.
- (iv) Ensure all aspects for compensation and assistance for livelihood restoration and improvement are identified and included in the LARPs.
- (v) Identify land and non-land impacts, based on the RoW markers, with support from EA/IA's engineering and safeguards team and revenue staff. Complete a census of displaced parsons (DPs) and inventory of losses. Conduct a social survey of the displaced population to establish the social and economic baseline and assess the

social impact of the project. The survey will include, sex disaggregated data, define and identify vulnerable households.

- (vi) Conduct stakeholder analysis and ensure meaningful consultations are conducted with all DPs (men and women) and other key stakeholders including civil society organizations.
- (vii) Document consultations, issues raised and make recommendations to incorporate concerns either in engineering designs or for inclusion in the LARPs
- (viii) Ensure compensation assessments are at full replacement costs and engage in early discussions with revenue staff to ensure current price assessments.
- (ix) Support PID in ensuring all compensation and resettlement assistance is paid to DPs before dispossession/construction startup.
- (x) Contribute towards the regular monitoring reports by providing relevant information on resettlement information.
- (xi) Given the limited time for project completion, LARPs should be implementation ready. Ensure all actions and institutional arrangements have been identified and put in to implement LARPs. Organize consultations between C&W and partner agencies in the province for implementing LARPs and identify support required to expedite implementation of the LARP. Include and cost these requirements in the LARP.
- (xii) Ensure LARP, monitoring reports and any corrective action plans (CAPs) are disclosed to the DPs in accordance with guidance provided in the SPS.
- (xiii) Assist C&W in implementing the grievance redress mechanism and timely resolution of grievances or complaints, if any.
- (xiv) Prepare an outline for internal monitoring and submit internal monitoring reports to ADB and NHA on a quarterly basis or on a case by case basis depending on construction schedules.
- (xv) Prepare corrective action plans (CAPs) based on the monitoring reports.
- (xvi) Maintain a complete computerized database of all documents and information.
- (xvii) All activities will be undertaken in coordination with PID's focal point and the project directors and PMU staff.
- (xviii) Any other tasks assigned by the project officer

# Outputs

The consultant's main outputs will be preparation of LARPs including IR and IPs checklists and CAPs (if any) and monitoring reports;

## Duration of Assignment

The assignment will be for 2 years full time work or 24 person months extendable to 36 person months, if required.

## Experience/Qualification

The consultant will have a Master's degree in social sciences with 5-10 years of full time or consultancy work experience as resettlement specialist and/or resettlement monitoring specialist. Full familiarity with and implementation experience of ADB's SPS 2009; IR and IPs policy and implementation procedures, and Pakistan's land acquisition act 1894 is a must.

# **Reporting Line**

The consultant will report to the Project Team Leader (Principal Natural Resources and Agriculture Specialist) and the Senior Safeguards Officer of ADB based at Pakistan Resident Mission (PRM) in Islamabad.

# **Duty Station**

The duty stations are; PID Department Lahore (80% person months) and PRM (20% person months) Islamabad.

## National Resettlement Specialist –C&W Department (Haveli, Kotli and Poonch) Terms of Reference

## Background Information

In response to the effects of the 2014 flood in Punjab and other flood-affected districts, ADB is preparing a Flood Emergency Reconstruction Project (FERP) and is assisting the Government of Pakistan to establish a disaster risk management fund. The loan-financed project will contribute to the economic and social recovery of flood-affected areas through the restoration and reconstruction of critical infrastructure to safer standards. The scope of the proposed project includes: (i) Rehabilitation and reconstruction of flood damaged roads and bridges; (ii) rehabilitation and reconstruction of damaged irrigation, drainage and flood protection schemes, and upgrading of priority flood protection schemes; and (iii) strengthening disaster risk management through: (a) human and institutional capacity development and strengthening the interface with the districts (downward) and other mandated institutions (horizontal and upwards) that have a key role in flood management; and, (b) multi-hazard risk assessment data and system development. The Disaster Risk Management Fund (the Fund) will address ex ante and ex post disaster wents.

## Scope of Work

The project intends to engage a full time Resettlement Specialist (consultant) to the roads and bridges component to be implemented by the Communications and Works Department (C&W). The C&W component of the project includes multiple provincial and district roads and bridges involving financing for works to be procured. The consultant will work closely with EA/IA's team of engineering and social and environment experts to conduct due diligence reviews of subprojects for retroactive financing and new construction in light of ADB's Safeguard Policy Statement 2009 (SPS). Based on the due diligence work, consultant will also assist the EA/IA in preparation, implementation and monitoring of resettlement plans. The focus of work will be on the involuntary resettlement and indigenous people's policy; objectives, principles and implementation procedures. The consultant will spend 80% of the time in the field (based at C&W office) and the remainder 20% in Islamabad at PRM.

## **Detailed Tasks**

The consultant will:

- (i) Review the design and make recommendations as appropriate to minimize or avoid land acquisition and resettlement (LAR) impacts.
- (ii) Prepare IR and IP checklist of subprojects (with completed and ongoing emergency restoration works) for retroactive financing and sections of subprojects requiring new construction.
- (iii) Provide an orientation/training to EA/IA's staff and consultants IR and IPs polices and implementation/compliance requirement of ADB's SPS 2009.
- (iv) Prepare land acquisition and resettlement plans (LARPs) in accordance with the land acquisition and resettlement framework (LARF) of the project, SPS 2009 and Pakistan's Land Acquisition Act of 1894.
- (v) Ensure all aspects for compensation and assistance for livelihood restoration and improvement are identified and included in the LARPs.

- (vi) Identify land and non-land impacts, based on the RoW markers, with support from EA/IA's engineering and safeguards team and revenue staff. Complete a census of displaced parsons (DPs) and inventory of losses. Conduct a social survey of the displaced population to establish the social and economic baseline and assess the social impact of the project. The survey will include, sex disaggregated data, define and identify vulnerable households.
- (vii) Conduct stakeholder analysis and ensure meaningful consultations are conducted with all DPs (men and women) and other key stakeholders including civil society organizations.
- (viii) Document consultations, issues raised and make recommendations to incorporate concerns either in engineering designs or for inclusion in the LARPs
- (ix) Ensure compensation assessments are at full replacement costs and engage in early discussions with revenue staff to ensure current price assessments.
- (x) Support C&W in ensuring all compensation and resettlement assistance is paid to DPs before dispossession/construction startup.
- (xi) Contribute towards the regular monitoring reports by providing relevant information on resettlement information.
- (xii) Given the limited time for project completion, LARPs should be implementation ready. Ensure all actions and institutional arrangements have been identified and put in to implement LARPs. Organize consultations between C&W and partner agencies in the province for implementing LARPs and identify support required to expedite implementation of the LARP. Include and cost these requirements in the LARP.
- (xiii) Ensure LARP, monitoring reports and any corrective action plans (CAPs) are disclosed to the DPs in accordance with guidance provided in the SPS.
- (xiv) Assist C&W in implementing the grievance redress mechanism and timely resolution of grievances or complaints, if any.
- (xv) Prepare an outline for internal monitoring and submit internal monitoring reports to ADB and NHA on a quarterly basis or on a case by case basis depending on construction schedules.
- (xvi) Prepare corrective action plans (CAPs) based on the monitoring reports.
- (xvii) Maintain a complete computerized database of all documents and information.
- (xviii) All activities will be undertaken in coordination with C&W's focal point and the project directors and PMU staff.
- (xix) Any other tasks assigned by the project officer

# Outputs

The consultant's main outputs will be preparation of LARPs including IR and IPs checklists and CAPs (if any) and monitoring reports;

# **Duration of Assignment**

The assignment will be for 2 years full time work or 24 person months extendable to 36 person months, if required.

## Experience/Qualification

The consultant will have a Master's degree in social sciences with 5-10 years of full time or consultancy work experience as resettlement specialist and/or resettlement monitoring

specialist. Full familiarity with and implementation experience of ADB's SPS 2009; IR and IPs policy and implementation procedures, and Pakistan's land acquisition act 1894 is a must.

## **Reporting Line**

The consultant will report to the Project Team Leader (Principal Natural Resources and Agriculture Specialist) and the Senior Safeguards Officer of ADB based at Pakistan Resident Mission (PRM) in Islamabad.

## **Duty Station**

The duty stations are; C&W Department (80% person months) and PRM (20% person months) Islamabad.

Land Acquisition and Resettlement Framework Project Number: 49038 April 2015

# PAK: Flood Emergency Reconstruction and Resilience Project (FERRP)

Prepared by: Government of Punjab Government of Pakistan

The Land Acquisition and Resettlement Framework is a document of the borrower. The views expressed herein do not necessarily represent those of ADB's Board of Directors, Management, or staff, and may be preliminary in nature.

# ABBREVIATIONS

ADB	-	Asian Development Bank	
BOR	-	Board of Revenue	
C&WD	-	Communication and Works Department	
CAS	-	Compulsory Acquisition Surcharge	
DP	-	Displaced Persons	
DMA	-	Disaster Management Authority	
EA/IA	-	Executing Agency/Implementing Agency	
ESU	-	Environment and Social Unit	
FRRP	-	Flood Reconstruction and Resilience Project	
FGD	-	Focus Group Discussion	
GoPb	-	Government of Punjab	
GRC	-	Grievance Redress Mechanism	
IR	-	Involuntary Resettlement	
IP	-	Indigenous People	
IPPF	-	Indigenous Peoples Planning Framework	
LAA	-	Land Acquisition Act of 1894	
LAC	-	Land Acquisition Collector	
LARF	-	Land Acquisition and Resettlement Framework	
LAR	-	Land Acquisition and Resettlement	
LARP	-	Land Acquisition and Resettlement Plan	
LDMS	-	Land Demarcation and Measurement Survey	
NGO	-	Non Governmental Organization	
OM	-	Operations Manual	
OPL	-	Official Poverty Line	
PID	-	Punjab Irrigation Department	
PSC	-	Project Steering Committee	
PCU	-	Project Coordination Unit	
SIA	-	Social Impact Assessment	
SPS	-	Safeguard Policy Statement	
SEMU	-	Social and Environment Management Unit	
ТА	-	Technical Assistant	

# **DEFINITION OF TERMS**

Terms	Definition	
Displaced Household:	All members of a subproject affected household residing under one roof and operating as a single economic unit, who are adversely affected by the Project or any of its components; may consist of a single nuclear family or an extended family group.	
Displaced Persons:	In the context of involuntary resettlement, displaced persons are those who are physically displaced (relocation, loss of residential land, or loss of shelter) and/or economically displaced (loss of land, assets, access to assets, income sources, or means of livelihoods) as a result of (i) involuntary acquisition of land, or (ii) involuntary restrictions on land use or on access to legally designated parks and protected areas.	
Compensation:	Payment in cash or in kind of the replacement cost of the acquired assets.	
Encroachers/Squatters	People who have trespassed onto private/community land to which they are not authorized. If such people arrived before the entitlements cut-off date, they are eligible for compensation for any structures, crops or land improvements that they will lose.	
Entitlement:	Range of measures comprising compensation, income restoration, transfer assistance, income substitution, and relocation, which are due to displaced persons, depending on the nature of their losses, to restore their economic and social base.	
ESU:	Environment and Social Unit	
Income Restoration:	Reestablishment of income sources and livelihoods of DPs.	
Involuntary Resettlement:	Land and/or asset loss, which results in a reduction of livelihood level. These losses have to be compensated for so that no person is worse off than they were before the loss of land and/or assets.	
Improvements:	Structures constructed (dwelling unit, fence, waiting sheds, animal pens, utilities, community facilities, stores, warehouses, etc.) and crops/plants planted by the person, household, institution, or organization.	
Land Acquisition:	The process whereby a person is compelled by a government agency to alienate all or part of the land a person owns or possesses to the ownership and possession of the government agency for public purpose in return for a consideration.	

**Rehabilitation:** Compensatory measures provided under the ADB Policy Framework on Involuntary Resettlement other than payment of the replacement cost of acquired assets.

- **Relocation:** The physical resettlement of an AP from her/his pre-program place of residence or business.
- **Replacement Cost:** The rate of compensation for acquired housing, land and other assets will be calculated at full replacement costs. The calculation of full replacement cost will be based on the following elements: (i) fair market value; (ii) transaction costs; (iii) interest accrued, (iv) transitional and restoration costs; and (v) other applicable payments, if any. In applying this method of valuation, depreciation of structures and assets should not be taken into account.
- **Resettlement Impact:** The nature and value of livelihood loss caused by the acquisition of land and/or assets
- **Vulnerable Groups:** Distinct group of people who may suffer disproportionately from resettlement effects. The policy defines vulnerable groups as households below the poverty line, the elderly, those without legal title to assets, landless, women, children and indigenous people.

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# I. INTRODUCTION

# A. The Project

1. The 2010 flood in Pakistan significantly damaged the roads network and irrigation facilities in the Province of Punjab and the Haveli, Kotli and Poonch districts. The Asian Development Bank (ADB) is supporting the efforts of the Government of Pakistan and Government of Punjab (GoPb) through the Flood Emergency Reconstruction and Resilience Project (project). The project will contribute to the economic and social recovery of flood-affected areas in Punjab Province and the Haveli, Kotli and Poonch districts through the rehabilitation and reconstruction flood damaged roads, bridges, irrigation and flood protection infrastructure and support ex ante disaster risk management activities in the aforementioned areas. Damaged and at-risk infrastructure in the flood-affected areas will be upgraded to incorporate resilience considerations to mitigate the potential impact of future flood events.

2. A Land Acquisition and Resettlement Framework (LARF-the framework) has been prepared to (i) address any adverse impacts of the project and (ii) compensate the displaced persons (DPs) in accordance with the country's Land Acquisition Act of 1894 (LAA) including the relevant rules and regulations applicable to Punjab Province, and Haveli, Kotli and Poonch districts and ADB's Safeguard Policy Statement 2009 (SPS), Operational Manuals on Involuntary Resettlement and Indigenous Peoples Policy and the Disaster and Emergency Assistance Policy (2004).

3. Keeping in the emergency nature of the project, the framework proposes an approach where project identification, detailed designs and preparation of land acquisition and resettlement plans (LARPs) will be undertaken during implementation. Governments of Punjab (GoPb) and Haveli, Kotli and Poonch districts may acquire land by applying (i) routine LAA land acquisition process and applicable regulations, or where land is urgently required (ii) negotiated purchase of land documented in a Land Acquisition and Resettlement Plan (LARP) in compliance with the provisions for negotiated purchase detailed in the SPS and provincial regulations. LARPs will be prepared and cleared by ADB as a condition for award of civil works contracts. LARP implementation will commence as soon as possible but all compensation and entitlements will be paid prior to economic and physical displacement in accordance with the requirements of the SPS.

4. The framework provides the guiding principles for preparing the LARPs. The indigenous or tribal peoples, as SPS 2009 defines them to be, are not found in living in the project areas. Therefore, a separate Indigenous Peoples Planning Framework (IPPF) is not required, as the loan will not include subprojects that affect indigenous peoples.

5. The framework agreed between ADB, and the Federal Government and the GoPb, sets out the safeguard principles, procedures, compensation, entitlements and implementation, disclosure and monitoring arrangements to be applied when identifying, designing, preparing and implementing LARPs. The framework is endorsed by the relevant government entities and will be uploaded on the ADB website.

# II. LEGAL AND POLICY FRAMEWORK

# A. The Land Acquisition Act (LAA) of 1894

6. The Pakistan law governing land acquisition is the LAA of 1894 and successive amendments. The LAA regulates the land acquisition process and enables the federal and provincial governments to acquire private land for public purposes and for companies through the exercise of the right of eminent domain. Land acquisition is a provincial responsibility and each province has made/adopted province-specific implementation regulations and rules.

7. A brief description of the salient features of different sections of LAA is given in Table 1 below. The right to acquire land for public purposes is established when Section 4 of the LAA is triggered. The LAA specifies a systematic approach for acquisition and compensation of land and other properties for development projects. It stipulates various sections pertaining to notifications, surveys, acquisition, compensation and apportionment awards, along with disputes resolution, penalties and exemptions. Surveys for land acquisition are to be disclosed to the displaced persons.

Key Sections	Salient Features of the LAA (1894)			
Section 4	Publication of preliminary notification and power for conducting survey.			
Section 5	Formal notification of land needed for a public purpose. Section 5a covering the need for enquiry.			
Section 6	The Government makes a more formal declaration of intent to acquire land.			
Section 7	The Land Commissioner shall direct the Land Acquisition Collector (LAC) to take order the acquisition of the land.			
Section 8	The LAC has then to direct that the land required to be physically marked out, measured and planned.			
Section 9	The LAC gives notice to all displaced persons (DPs) that the Government intends to take possession of the land and if they have any claims for compensation then these claims are to be made to him at an appointed time.			
Section 10	Delegates power to the LAC to record statements of DPs in the area of land to be acquired or any part thereof as co-proprietor, sub-proprietor, mortgagee, and tenant or otherwise.			
Section 11	Enables the Collector to make enquiries into the measurements, value and claim and then to issue the final "award". The award includes the land's marked area and the valuation of compensation.			
Section 16	When the LAC has made an award under Section 11, he will then take possession and the land shall thereupon vest absolutely in the Government, free from all encumbrances.			
Section 17	Urgency acquisition.			
Section 18	In case of dissatisfaction with the award, DPs may request the LAC to refer the case onward to the court for a decision. This does not affect the Government taking possession of the land.			
Section 23	The award of compensation for the owners for acquired land is determined at its market value plus 15% in view of the compulsory nature of the acquisition for public purposes.			
Section 28	Relates to the determination of compensation values and interest premium for land acquisition			
Section 31	Section 31 provides that the LAC can, instead of awarding cash compensation in respect of any land, make any arrangement with a person having an interest in such land, including the grant of other lands in exchange.			

# Table 1: Salient Features of the Land Acquisition Act 1894 and Successive Amendments

# B. ADB's Policy Principles for Involuntary Resettlement and Indigenous Peoples

8. The ADB's policy principles and objectives for Involuntary Resettlement (IR) are described in Annex 1. When land other than the unencumbered government-owned land is to

be acquired then a LARP (Annex 2) is required. The IR checklist for screening and categorizing subprojects is in (Annex 3).

# C. Comparison of Key Features of LAA 1894 and ADB Policy Principles and Practices

9. A comparison between the LAA and ADB safeguard policy principles (SPS) with regard to key land acquisition and resettlement (LAR) aspects is shown in Table 2. The object of this exercise is to identify if and where the two sets of procedures are in conformity with each other and more importantly where there are differences and gaps. The key ADB Policy Principles are (i) the need to screen the project early on in the planning stage; (ii) carry out meaningful consultation and establish a grievance redress mechanism; (iii) at the minimum, restore livelihood levels to what they were before the project and improve the livelihoods of affected vulnerable groups; (iv) prompt compensation, at full replacement cost, is to be paid before physical and economic displacement; (v) provide displaced people with adequate assistance; (vi) ensure that displaced people who have no statutory rights to the land that they are working are eligible for resettlement assistance and compensation for the loss of non-land assets; and (vii) disclose all LARPs endorsed by government.

Pakistan's Land Acquisition Act 1894	Gap Filling Measures (SPS 2009 requirements)
Only titled landowners or customary rights holders are recognized for compensation.	Lack of title should not be a bar to resettlement and rehabilitation support. Requires equal treatment of those without clear land titles (for example, squatters or other informal settlers) in terms of their entitlements for resettlement assistance and compensation for the loss of non-land assets.
Only registered landowners, sharecroppers and lease holders are eligible for compensation of crop losses.	Crop compensation is to be provided irrespective of the land registration status of the affected farmer/share cropper.
Tree losses are compensated based on outdated officially fixed rates by the relevant forest and agriculture departments.	Tree losses are to be compensated according to market rates based on productive age or wood volume, depending on tree type.
Negotiated Purchase, no LARP required. Procedures available through instructions and agreement signed.	Prepare LARP in accordance with the provisions detailed in the SPS (2009)
Land valuation is based on the median registered land transfer rate over the 3 years prior to Section 4 of the LAA being invoked. A 15% compulsory acquisition charges are paid over and above the assessed compensation. However, recent practice is that prices based on the average over the last one year prior to acquisition commencing is applied. Provinces have also issued instructions for assessing compensation to ensure displaced persons receive compensation at market price.	Replacement cost surveys undertaken by the EA and shared with assessors when determining compensation. Rate of compensation must be at full replacement costs with valuation of land and assets to be undertaken by qualified and experienced experts.
The valuation of structures is based on official rates, with depreciation deducted from gross value of the structure and also 15% of the value of salvaged materials.	The valuation of built-up structures is based on current market value but with consideration of the cost of new construction of the structure, with no deduction for depreciation.

# Table 2: Comparison of Land Acquisition Act 1894 (LAA) andADB Safeguard Policy Statement 2009 Gap Filling Measures

Pakistan's Land Acquisition Act 1894	Gap Filling Measures (SPS 2009 requirements)
The decisions regarding land acquisition and the amounts of compensation to be paid are published in the official Gazette and notified in accessible places so that the people affected are well informed.	Carry out consultations to inform potentially displaced persons about the likely impacts, finalization of award and payment of compensation. Disclose draft LARPs and their updates, as applicable.
There is no provision for income and livelihood rehabilitation measures. There are also no special allowances for vulnerable groups. There are no requirements to assess opportunities for benefit sharing. Untitled DPs are not entitled to rehabilitation support.	The ADB policy requires rehabilitation of livelihoods, and support during the relocation process. There are also provisions to be made to cover transitional period costs, and livelihood restoration. Particular attention must be paid to the poor and vulnerable groups, including women. A guiding principle is that DPs should at least be able to reach a defined minimum livelihood standard. In rural areas DPs should be provided with legal access to replacement land and resources to meet the defined minimum livelihood level. In urban areas provision should be made for appropriate income sources and the legal and affordable access to adequate housing. Untitled DPs have rights.
Prepare and disclose land acquisition and resettlement plans LARPs. There is no law or policy that requires preparation of LARPs.	Resettlement plans are prepared and disclosed.
Grievance redress is established through the formal land acquisition process at a point in time or through appeals to the court	Provide mechanisms that are accessible locally and available throughout project implementation.
Only compensation is paid but not resettlement allowances, there is no mechanism to ensure payment is made before displacement	All compensation and allowances to be paid prior to physical or economic dislocation.
No requirements to prepare and disclose monitoring reports	Prepare and disclose monitoring reports
No special provisions to deal with support to displaced, vulnerable, and tribal groups.	Combined resettlement and indigenous peoples plan prepared

# D. Remedial Measures to Reconcile Gaps between the LAA 1894 and SPS 2009

10. Project specific resettlement issues have been addressed to assist non-titled persons, and bridge the gap between existing practice and the main guidelines of SPS with regard to involuntary resettlement. To reconcile the inconsistencies between the LAA and SPS, the Governments of Punjab and Haveli, Kotli and Poonch districts have drafted this framework. Provision of subsidies or allowances will be given for affected households that maybe relocated, suffer business losses, or maybe vulnerable. As detailed in the SPS, the content and complexity of a LARP will vary depending on the scale and severity of a subproject's impacts. An outline for preparing resettlement plans is in Annex 2.

# E. Land Acquisition and Resettlement Modalities and Procedures

11. Land would be urgently required to complete the reconstruction work within the emergency loan. The preparation of LARPs and compensation disbursement fully depend on (i) availability of project design, (ii) impact assessment, (iii) valuation of land and assets including community assets, and (iv) identification and verification of owners/occupants and updated land records. Preparation of LARP and compensation disbursement is not only a time consuming process, but fully depends on the availability of DPs and land records, which, if lost or damaged, have to be re-created.

12. The technical assistance consultants (TA) will be recruited to support the project executing and implementing agencies (EA/IAs) in preparing LARPs with the respective provincial Board of Revenue (BOR) staff.

13. In accordance with the LAA, a two-step procedure may be adopted for land acquisition, first negotiated purchase and if that fails expropriation. Negotiated purchase will be initiated on the written request of the acquiring department to the collector. The collector will constitute an independent committee consisting including the district collector and representatives of the acquiring department and DPs. The process of negotiation with the DPs will be completed within 60 days of the start of negotiations. If successful, the collector proceeds with registering the deed of sale between the parties. A LARP will be prepared describing the procedures followed including requirements detailed in the SPS for negotiated purchase.

14. To determine the price, the committee may consider the following: (i) the price paid for land recently acquired including in the vicinity; (ii) the price paid in private transactions as discoverable from the register of mutations and the record of the registration department; (iii) all other information available including instructions provided in the LAA; and (iv) the committee may consult respectable people who are disinterested with regard to the value of the land. The price so determined must meet full replacement<sup>20</sup> costs of lost land and assets as a standard of compensation as explained in SPS 2009, SR 2 para 10.Table 3 provides procedures involved in the application of LAA.

## Table 3: Application of the Land Acquisition Act 1894

Application of LAA	Procedures and Clearance
Negotiated Purchase and routine acquisition under the LAA	A LARP will document the procedures and valuation mechanism, and append a copy of the deed of sale. If negotiation fails, the LARP will provide details and document the routine procedures applied under the LAA and the SPS.

16. The following table describes the type of civil works required and proposed measures to prepare and implement LARPs.

Retroactive Financing	Complete involuntary resettlement (IR) and indigenous peoples (IP) checklists and categorization forms and submit with project approval documents to ADB for clearance. Only category 'C' projects will be eligible for financing.
Reconstruction on existing alignment	No land acquisition and resettlement expected. Conduct sample spot checks on site and submit

#### Table 4: Civil Works and LARP Preparation

<sup>&</sup>lt;sup>20</sup> The rate of compensation for acquired housing, land and other assets will be calculated at full replacement costs. The calculation of full replacement cost will be based on the following elements: (i) fair market value; (ii) transaction costs; (iii) interest accrued, (iv) transitional and restoration costs; and (v) other applicable payments, if any. Where market conditions are absent or in a formative stage, the borrower/client will consult with the displaced persons and host populations to obtain adequate information about recent land transactions, land value by types, land titles, land use, cropping patterns and crop production, availability of land in the project area and region, and other related information. The borrower/client will also collect baseline data on housing, house types, and construction materials. Qualified and experienced experts will undertake the valuation of acquired assets. In applying this method of valuation, depreciation of structures and assets should not be taken into account.

	checklist and categorization forms to ADB for clearance prior to award of civil works contracts.
New alignments and new locations	LARPs will be prepared as a condition for award of civil works contracts and cleared by ADB.
Monitoring	The EAs/IAs will provide quarterly monitoring reports to ADB confirming with evidence the LARPs or negotiated purchase has been implemented in accordance with the respective subproject LARP. In case of section-by- section construction, a third-party validation of LARP implementation, especially disbursement of full payments to the DPs will be required.

# F. LAR Processing Procedures and Safeguard Documentation

15. The relevant EAs, with the support of TA consultants will process the screening checklists, and prepare LARPs and monitoring reports.

- 16. The following criteria for subproject selection will be applied:
  - (i) Avoid or minimize land acquisition from flood-affected households.
  - (ii) Avoid subprojects that affect indigenous peoples.
  - (iii) Reconstruction on existing alignment.
  - (iv) Avoid or to the extent possible, minimize land acquisition and resettlement (LAR). Select subprojects that do not require land acquisition or resettlement, or subprojects on unencumbered government land.
  - (v) Select projects of priority need for connectivity and protection of lives and livelihoods.
  - (vi) Minimal land acquisition required.
  - (vii) Prepare and implement land acquisition and resettlement plans for all projects that have land acquisition and resettlement impacts.
  - (viii) Except where legal owners for compensation are identified, pay entitlements and compensation in joint names to eligible men and women.

# G. Procedure of Formulating a Land Acquisition and Resettlement Plan: Social Impact Assessment and Census

17. If resettlement impacts are unavoidable in implementing a subproject, the EA with the support of the TA consultant and the revenue staff, will formulate LARPs in parallel with subproject design according to the following procedure:

- (i) Complete the screening checklist. If land acquisition or resettlement is required, prepare LARPs.
- (ii) For retroactive financing, complete screening checklists and submit with approval request.
- (iii) Conduct Focus Group Discussions (FGD) including, consultations with women and vulnerable households to (a) obtain stakeholder inputs regarding how to avoid or at least minimize involuntary resettlement, and (b) to identify their needs and preferences.
- (iv) LARPs will be based on detailed design, detailed measurement survey as well as inventory of lost assets and census based on the final revenue record and compensation prices approved by the BOR and respective agencies. Environment and Social Units (ESU) in EAs/IAs will assess replacement costs through independent assessments of sales (private and in sales registers), local

materials for structure and other immovable assets replacement valuation, and updated crop and trees price assessments including, consultation with the relevant agencies on price assessments. Undertake (a) a socioeconomic survey including sex disaggregated data collection to identify gender impacts and establish the social and economic baseline to prepare LARPs. ESU will inform ADB if there are changes in impacts and prepare updated LARPs accordingly. Each LARP will justify why they need to be updated.

(v) Establish a 100% census survey of DPs, measure lost lands, complete an inventory of lost land and assets of all DPs and addresses of households, complete the land demarcation and measurement surveys (LDMS).

## H. Consultation Participation and Disclosure

18. The FGDs undertaken for establishing baseline surveys will also focus on consultation with the DPs to identify their concerns and take into account special needs and considerations. Consultations will be gender inclusive and ensure vulnerable households are included. The decisions of such meetings will be recorded, and these records will indicate the responsibility and timeline for implementing the decisions. Each resettlement plan will document all public consultations held and the disclosure of resettlement information. During resettlement plan preparation, resettlement information will be disclosed to all DPs in their own language, and their views and opinions will be taken into consideration in finalizing the plans. Since many DPs are likely to be non-literate, the LARPs will be explained to them in separate groups. Particular attention will be placed on including women and vulnerable groups in all consultations. Final LARPs will be translated into local languages and disclosed through public notices posted at the EA/IA offices, published in newspapers, and posted on ADB's website. The DPs will be closely consulted in resettlement site selection and livelihood restoration, as relevant.

19. The displaced communities have a diverse group of people belonging to different casts that participate in mainstream economic and political activities and are represented in public institutions, civil services, and educational institutions. Social inequalities and vulnerabilities in these communities usually arise from economic differentiation, as land is owned by a few large, powerful families who rent it out to others who cultivate crops and raise livestock. Individual projects are unlikely to change this dominant mode of economic system. However, vulnerabilities of all affected groups in the project areas will be identified through FGDs. This is to ensure effective consultations and that culturally- appropriate benefits will reach each displaced group. As part of this assessment, the EA/IA of each sector will examine the vulnerability of different groups in terms of potential exclusion from subproject benefits, negative subproject impacts, and the need for specific culturally compatible mechanisms for participation by women, the permanently disabled, and other vulnerable groups. If any of the above are found in a subproject area, the EA/IA will incorporate adequate measures to address such vulnerabilities in project design. If land acquisition or relocation becomes necessary, people's entitlements will be ensured through the resettlement plan that will be prepared in accordance with the framework.

20. ESU will be responsible for disclosing resettlement information and plans to all DPs in their own language. The project EA/IA will endorse the LARP before submission to ADB for review.

# III. COMPENSATION ELIGIBILITY AND ENTITLEMENTS

# A. Entitlements

21. The entitlements for Compensation, Resettlement and Rehabilitation Assistance may be enhanced to mitigate and improve livelihoods of the DPs but not be reduced or lowered in any of the subproject LARPs. Details are provided in the entitlement matrix.

# B. Eligibility

- 22. The DPs eligible for compensation or rehabilitation provisions under the Program are:
  - (i) All land owning DPs losing land or non-land assets, i.e., crops and trees whether covered by legal title or traditional land rights, whether for temporary or permanent acquisition.
  - (ii) Tenants and share-croppers, whether registered or not; for all non-land assets, based on prevailing tenancy arrangements.
  - (iii) DPs losing the use of structures and utilities, including titled and non-titled owners, registered, unregistered, tenants and leaseholders plus encroachers and squatters.
  - (iv) Displaced persons losing business, income and salaries of workers or a person or business suffering temporary effects, such as disturbance to land, crops and business operations both permanently and also temporarily during construction.
  - (v) Loss of communal property, lands, and public infrastructure.
  - (vi) Vulnerable displaced persons identified through the impact assessment and FGD.
  - (vii) In the event of relocation, all DPs will receive transitional and other support to reestablish shelter and livelihoods.

23. In order to avoid an influx of outsiders, compensation eligibility will be limited by a cut-off date for each subproject on the day of the beginning of the sub-projects impacts and census survey. The cut-off date will be announced through village institutions and in consultation meetings with DPs.

# C. Entitlement Matrix

24. Compensation and rehabilitation entitlements are summarized in the Entitlement Matrix in Table 5.

Assets lost	Specification	Displaced Person	Compensation Entitlements
Residential/ commercial land		Owner (legal/legalizable)	<ul> <li>Cash compensation at replacement cost<sup>21</sup> plus 15% compulsory acquisition surcharge (CAS) free of taxes, registration and transfer costs; or</li> <li>Land for land compensation through provision of plots of comparable value and location as the lost asset, including transitional support.</li> </ul>
		Renter/leaseholder	<ul> <li>Cash compensation value proportionate to the duration of the remaining lease period.</li> </ul>
		Encroacher/Squatter	<ul> <li>Self-relocation allowance covering one year of agricultural income; or</li> <li>Provision of a replacement plot in a public resettlement area.</li> </ul>
Agricultural land, including cultivable land and uncultivable wasteland	All land losses irrespective of impact severity	Owner	<ul> <li>Cash compensation at (market value replacement cost plus 15% CAS, free of taxes, of registration and transfer costs; or</li> <li>Land for land compensation through provision of plots of equal value and productivity as that lost.</li> </ul>
		Sharecropper/Tenant (registered or not)	<ul> <li>Cash compensation equal to the market value of the share of lost harvests: two shares if the land loss is permanent, one if it is temporary.</li> </ul>
		Lease Tenant (registered or not)	<ul> <li>Cash equivalent of the market value of the gross yield of lost land for the remaining lease years, and reimbursement of remaining lease cost. Or alternate lease arrangements</li> </ul>
		Encroacher/Squatter	<ul> <li>Rehabilitation allowance equal to the market value of the harvest of lost land for one year (both rabi and kharif crops) in addition to standard crop compensation.</li> </ul>

## Table 5: Entitlement Matrix

<sup>&</sup>lt;sup>21</sup> The rate of compensation for acquired housing, land and other assets will be calculated at full replacement costs. The calculation of full replacement cost will be based on the following elements: (i) fair market value; (ii) transaction costs; (iii) interest accrued, (iv) transitional and restoration costs; and (v) other applicable payments, if any. Where market conditions are absent or in a formative stage, the borrower/client will consult with the displaced persons and host populations to obtain adequate information about recent land transactions, land value by types, land titles, land use, cropping patterns and crop production, availability of land in the project area and region, and other related information. The borrower/client will also collect baseline data on housing, house types, and construction materials. Qualified and experienced experts will undertake the valuation of acquired assets. In applying this method of valuation, depreciation of structures and assets should not be taken into account.

Assets lost	Specification	Displaced Person	Compensation Entitlements
Residential and commercial structures		Owner of the structure, including Encroachers/Squatters	<ul> <li>Cash compensation at full replacement cost for affected structures and other fixed assets, free of salvageable materials, depreciation and transaction cost and also transportation cost; or if partial loss, full cash assistance to restore the remaining structure. Fees and taxes (if applicable) will be waived. The option of relocation and relevant support will be discussed during the focus group discussions and included in the LARPs.</li> </ul>
		Renter/Leaseholder	<ul> <li>Cash compensation equivalent to three months' rent or a value proportionate to the duration of the remaining lease.</li> </ul>
Community Assets			<ul> <li>Rehabilitation/substitution or cash compensation at full replacement cost of the affected structures and utilities.</li> </ul>
Businesses		All DPs so impacted	<ul> <li>Cash compensation equal to income during the interruption period, as determined through the SIA and included in the LARP</li> </ul>
Employment		All DPs so impacted	<ul> <li>Indemnity for lost wages for the period required to reestablish business as determined through the Social Impact Assessment (SIA) and included in the LARP.</li> </ul>
Crops	Affected crops	Cultivator of crop	<ul> <li>Crop compensation in cash at the full market rate for one year's agricultural income (both rabi and kharif harvests). If sharecropped or a tenant then compensated according to shares.</li> </ul>
Trees	All affected trees	Owner	<ul> <li>Fruit trees: compensation to reflect income replacement as assessed by Horticulture department based on market value of annual produce, projected for number of years the tree can potentially produce fruit.</li> <li>Timber trees: trees grown and/or used for timber then compensation is to reflect the market value of tree's wood content, based on the wood measurement survey of forest department.</li> </ul>
Relocation	Transport/ transition costs	All DPs to be relocated	<ul> <li>Provision of allowances to cover transport costs and transitional costs on actual cost basis at current market rates. If physical relocation of the affected households is required and requested by the displaced persons, appropriate relocation sites will be developed or through support provided to flood victims. The need for support during the transitional period will be assessed through the SIA and included in the LARP.</li> </ul>
Vulnerable DP livelihood support		Poor and female headed households and other vulnerable households, including the elderly or other groups as identified through the SIA.	<ul> <li>Cash allowance equivalent to at least 6 months of inflation adjusted official poverty line (OPL) or minimum wages/month (whichever is higher) as fixed by the GOPb (in accordance with figures released by the Province) using the poverty line index or as determined through the social impact assessment surveys.</li> <li>First priority for skills training under emergency support. Job placement program employing DPs in project reconstruction activities.</li> </ul>
Unidentified Losses	Unanticipated impacts	All DPs	<ul> <li>Dealt with as appropriate during sub-project implementation according to the ADB policy.</li> </ul>

# D. Land for Land Compensation

25. Land for land compensation has significant advantages in that it reduces the chance of displaced people spending their compensation on items that will not provide them with an alternative economic livelihood. However, in many locations there is limited land or land will not be available for immediate dispensation. In cases where DPs desire land for land compensation, then the process by which replacement land is identified needs to be recorded. When land for land compensation is used, along with provision of replacement housing, then the replacement plots are to include facilities and services such as water supply, sanitation, roads, drainage and electricity. The LARPs will detail the costs for site preparation and for the provision of these basic facilities including, transaction costs such as site survey, land registration. The LARPs will clearly detail site preparation and resettlement schedules and tenure arrangements. In managing the land for land relocation, the socio-cultural and religious characteristics of the displaced persons, gender considerations and host communities will be taken into consideration and the distance between the old and new locations should be minimized as far as is possible. If land for land cannot be found, the LARPs will clearly demonstrate the lack of land.

# E. Implementation Arrangements:

26. To address the institutional limitations the following implementation arrangements will be established.

# E.1 Haveli, Kotli and Poonch Districts

27. The Planning and & Development Department (P&DD) will be the overall Executing Agency (EA) for the portion of the project to be implemented in Haveli, Kotli and Poonch, and also the implementing agency (IA) for the DRM strengthening component of the project. The other IA will be the C&W Department for reconstruction of the roads (and bridges) component, and would also be responsible for the respective cash-for-work efforts linked to the roads and bridges reconstruction, and surveys and landslides works that they undertake in their respective components. The Forest department will be IA for the DRM pilot projects for bio-engineering interventions on slides along major corridors including the roads included in the project scope in Haveli, Kotli and Poonch districts.

28. The EA will establish a project steering committee (PSC) to provide policy direction and strategic oversight, and inter-agency coordination. The PSC will meet at least quarterly, to review implementation performance, approve annual plans and advise on policy level actions. The proposed composition of the steering committee is provided below:

# **Steering Committee**

- Additional Chief Secretary, Planning and Development (Chair of the Steering Committee)
- Secretary, Communication and Works Department
- Secretary/Director General, Irrigation Department (to be confirmed)
- Secretary Forest, Wildlife and Fisheries Department
- Secretary, Finance Department
- Director General, Disaster Management Authority

- Director Land Use Planning Unit
- Project Coordinator of the Project, Planning and Development Department (also serves as secretary of the Steering Committee).

29. A project coordination unit (PCU) will be established that will have two distinct functions – one as an EA and one as an IA. As an EA it will have the overall responsibility for planning, coordination, monitoring, overall reporting and approval of subprojects and activities according to the selection criteria, relating to disaster risk management support; and provincial and districts roads. The PCU in the P&D will be headed by a dedicated Director General, supported by staff deputed from C&W, Irrigation, Land Use Planning, Forestry and SDMA. The C&W Department will establish an Environment and Social Unit (ESU), which will be headed by a Director General or General Manager Project Coordination Unit (within P&DD). The ESU will consist of a resettlement and gender and an environment specialist who will be responsible for preparation, disclosure, implementation and monitoring of LARPs. The ESU will be supported by resettlement, gender and environment specialists in undertaking these tasks.

# E.2 Government of Punjab

30. The Planning and Development Department (P&D) of the GoPb will be the Executing Agency (EA) for the project, and the implementing agencies (IAs) for DRM subcomponent related to its role as data clearing house. The other IA are the PID for the irrigation, drainage, and DRM subcomponent on flood risk management; C&W for provincial and district roads; and PDMA for DRM capacity building, assessment and planning support subcomponent. The EA will establish a project steering committee (PSC) to provide policy direction and strategic oversight, and inter-agency coordination. The PSC will meet at least quarterly, to review implementation performance, approve annual plans and advise on policy level actions. The proposed composition of the steering committee is provided below:

# **Steering Committee**

- Chairman, Planning and Development Board (Chair of the Steering Committee)
- Secretary, Communication and Works Department
- Secretary, Irrigation Department
- Secretary, Finance Department
- Member Infrastructure, Planning and Development Department (also serves as secretary of the Steering Committee)
- Director General, Provincial Disaster Management Authority
- Chief Executive Officer of the Urban Unit

31. The P&D will have the overall responsibility for planning, monitoring, project progress review, coordinating with line departments/agencies and the Federal Government for approval of the umbrella project by the Central Development Working Party (CDWP). The Project Coordination Unit (PCU) at the P&D will be headed by the Member Infrastructure, supported by existing Chief of section related to irrigation and roads. However, Chief DRM responsibilities will be carried out by the Chief, Irrigation until a Chief DRM position can be established. The approval of subprojects and related activities according to the selection criteria relating in each sector will be the responsibility of competent approval forum, at the department, provincial and federal level.

32. An Environment and Social Unit (ESU) will be established within C&W department, which will be headed by a Deputy Secretary C&W department. The ESU will have a

resettlement and gender and an environment specialist to be supported by TA consultants who will also assist ESU in preparation, implementation, monitoring and disclosure of LARPs of subprojects.

- 33. The roles and responsibilities of the ESU are as follows:
  - (i) The consultants will support all EAs/IAs and build the capacity of ESU in safeguards management;
  - (ii) Prepare screening and categorization checklists;
  - (iii) Conduct consultations and information disclosure
  - (iv) Coordinate with relevant local agencies, particularly revenue departments;
  - (v) Prepare LARPs
  - (vi) Prepare and submit monitoring reports to ADB to confirm resettlement plans have been implemented;
  - (vii) All procedural requirements including translation and disclosure of LARPs will be implemented by the ESU supported by the consultant;
  - (viii) Support the EA/IA and ensure the delivery of compensation and other entitlements and maintain records;
  - (ix) The consultant and the EA/IAs in coordination will be responsible for maintaining a complete database of all affected persons, inventory of assets, payments and other relevant field data;
  - (x) Develop a functioning grievance function with gender sensitive protocols and outreach and links to the provincial ombudsman's office; provide training to ESU/SEMU staff to handle grievance and monitor progress.
  - (xi) Maintain an MIS related resettlement and social development.

# E.3 TA Consultant Support

34. The loan sponsored TA safeguards consultants provide support to the EAs/IAs in coordination with relevant government agencies and will assist preparation and implementation of LARPs besides assisting preparation and disclosure of monitoring reports. The respective EA/IAs and BORs and related local agencies will provide the necessary support services for facilitating expeditious preparation, implementation and monitoring of LARPs. TA consultants will work with the revenue department and the ESU/SEMU to support the following : (i) consultation with affected communities and information disclosure (ii) support the preparation of the revenue record and paper work required for finalizing the land awards (iii) support displaced persons in preparing their documents to receive compensation (iv) participate in meetings to ensure transparency and maintain records (v) assist ESU/SEMU in preparation of monitoring reports to be provided to ADB for review. (vi) support the functioning of the grievance mechanism (vii) establish and maintain an up to date management information system to include all relevant information on displaced persons.

- 35. The following procedures of formulating LARPs, SIA and Census will be adopted:
  - (i) If resettlement impacts are unavoidable in implementing a subproject, the EA with the support of the TA consultants and the revenue staff, will formulate LARPs in parallel with subproject design according to the following procedures:
  - (ii) Complete the screening checklist. If land acquisition or resettlement is required, prepare LARPS.

- (iii) For retroactive financing, complete screening checklists and submit with approval request.
- (iv) Conduct Focus Group Discussions (FGD) including, consultations with women and vulnerable households to (a) obtain stakeholder inputs regarding how to avoid or at least minimize involuntary resettlement, and (b) to identify their needs and preferences.
- (v) LARPs will be based on detailed design, detailed measurement survey as well as inventory of lost assets and census based on the final revenue record and compensation prices approved by the BOR and respective agencies. Environment and Social Units (ESU) in EAs/IAs will assess replacement costs through independent assessments of sales (private and in sales registers), local materials for structure and other immovable assets replacement valuation, and updated crop and trees price assessments including, consultation with the relevant agencies on price assessments. Undertake (a) a socioeconomic survey including sex disaggregated data collection to identify gender impacts and establish the social and economic baseline to prepare LARPs. ESU will inform ADB if there are changes in impacts and prepare updated LARPs accordingly. Each LARP will justify why they need to be updated.
- (vi) Establish a 100% census survey of DPs, measure lost lands, complete an inventory of lost land and assets of all DPs and addresses of households, complete the land demarcation and measurement surveys (LDMS).

# F. Grievance Redress Mechanism

36. Field level grievances will be addressed through a local grievance redress committee (GRC) to be formally constituted by the EA/IA under each subproject. The GRC, headed by a Project Director, will consist of a grievance officer, a representative from the DPs, locally present NGO representative, the ESU's resettlement specialist and concerned revenue staff. The GRC will be formally notified and established at the project sites. The GRCs' will function as open forums for hearing complaints and exploring quick resolutions to resolving conflicts. The GRC will be required to develop an outreach program including links to the provincial ombudsman's office. Each GRC will record its deliberations and inform the concerned parties of a resolution within 2 weeks of its findings and recommendations. If the GRC cannot resolve the grievance, they will be facilitated to take their complaints to the provincial ombudsmen. DPs have the right to appeal to the courts. Communities will be informed about the GRC through the ESU outreach program. Grievance may also be addressed to ADB Office of Special Projects Facilitator.

37. To ensure women have access to the grievance mechanism, separate focus group discussions will be held with them to design protocols that are suited to their needs including procedures and mechanisms to enable their access to the mechanism, including, access to the provincial ombudsman's office. Outreach programs will be tailored to women's needs to ensure information is communicated to them.

# G. LARP Budgeting and Financing

# Budget

38. All LAR costs inclusive of compensation, resettlement and rehabilitation allowances livelihood and income restoration support form an integral component of project costs, and will be included in the LARP under separate budget lines indicating unit costs under separate

heads. All EAs/IAs will ensure adequate funds are available on time to implement the LARPs. EAs will be responsible for financing and disbursing (i) all entitlements that are not payable under the requirements of the LAA; (ii) logistics to run the ESU including, translations and outreach and GRC functions; and (iii) any other functions related to ensuring the ESU functions effectively and delivers timely outputs.

## H. Monitoring and Evaluation

39. The land acquisition and resettlement process of each subproject will be monitored both internally by the EA and by the TA and Project Supervisions Consultants. Internal monitoring reports will be submitted by the EA/IAs on a quarterly basis to ADB. The supervision consultant will submit external monitoring reports to ADB confirming satisfactory implementation of LARPs (as a third-party validation. This will be particularly required in cases of section-by-section construction) as and when each subproject LAR activities are completed. The monitoring reports will be translated and disclosed to the displaced persons and placed on the project website by the respective EAs. ADB reserves the right to monitor subprojects on a case-by-case basis.

#### Involuntary Resettlement Principles and Objectives ADB's Safeguard Policy Statement 2009 (SPS)

**Objectives:** To avoid involuntary resettlement wherever possible; to minimize involuntary resettlement by exploring project and design alternatives; to enhance, or at least restore, the livelihoods of all displaced persons in real terms relative to pre-project levels; and to improve the standards of living of the displaced poor and other vulnerable groups.

**Scope and Triggers:** The involuntary resettlement safeguards covers physical displacement (relocation, loss of residential land, or loss of shelter) and economic displacement (loss of land, assets, access to assets, income sources, or means of livelihoods) as a result of (i) involuntary acquisition of land, or (ii) involuntary restrictions on land use or on access to legally designated parks and protected areas.

#### **Policy Principles:**

- Screen the project early on to identify past, present, and future involuntary resettlement impacts and risks. Determine the scope of resettlement planning through a survey and/or census of displaced persons, including a gender analysis, specifically related to resettlement impacts and risks.
- 2. Carry out meaningful consultations with displaced persons, host communities, and concerned nongovernment organizations. Inform all displaced persons of their entitlements and resettlement options. Ensure their participation in planning, implementation, and monitoring and evaluation of resettlement programs. Pay particular attention to the needs of vulnerable groups, especially those below the poverty line. These include the landless, the elderly, women and children. Specific safeguards cover Indigenous People, including those without statutory title to land, including those having communal rights, and ensure their participation in consultations. Establish a grievance redress mechanism to receive and facilitate resolution of the displaced persons' concerns. Support the social and cultural institutions of displaced persons and their host population. Where involuntary resettlement impacts and risks are highly complex and sensitive, compensation and resettlement decisions should be preceded social preparation phase. by а Improve, or at least restore, the livelihoods of all displaced persons through (i) land-based resettlement strategies when affected livelihoods are land based and where it is possible to give cash compensation at replacement value for land when the loss of land does not undermine livelihoods, (ii) prompt replacement of assets with access to assets of equal or higher value, (iii) prompt compensation at full replacement cost for assets that cannot be restored, and (iv) additional revenues and services through benefit sharing schemes where these are possible.
- 3. Provide physically and economically displaced persons with needed assistance, including the following: (i) if there is relocation, secured tenure to relocation land, better housing at resettlement sites with comparable access to employment and production opportunities, integration of resettled persons economically and socially into their host communities, and extension of project benefits to host communities; (ii) transitional support and development assistance, such as land development, credit facilities, training, or employment opportunities; and (iii) civic infrastructure and community services, as required.
- 4. Improve the standards of living of the displaced poor and other vulnerable groups, including women, to at least national minimum standards. In rural areas provide them with legal and affordable access to land and resources, and in urban areas provide them with appropriate income sources and legal and affordable access to adequate housing.
- Develop procedures in a transparent, consistent, and equitable manner if land acquisition is through negotiated settlement to ensure that those people who enter into negotiated settlements will maintain the same or better income and livelihood status.
- 6. Ensure that displaced persons without titles to land or any recognizable legal rights to land are eligible for resettlement assistance and compensation for loss of non-land assets.
- 7. **Prepare a resettlement plan** elaborating on displaced persons' entitlements, the income and livelihood restoration strategy, institutional arrangements, monitoring and reporting framework, budget, and time-bound implementation schedule.
- 8. **Disclose a draft resettlement plan**, including documentation of the consultation process in a timely manner, before project appraisal, in an accessible place and a form and language(s) understandable to displaced persons and other stakeholders. Disclose the resettlement plan and its updates to displaced persons.
- 9. Conceive and execute involuntary resettlement as part of a development project or program. Include the full costs of resettlement in the presentation of project's costs and benefits. For a project with significant involuntary resettlement impacts, consider implementing the involuntary resettlement component of the project as a stand-alone operation.
- 10. Pay compensation and provide other resettlement entitlements before physical or economic displacement. Implement the resettlement plan under close supervision throughout project implementation.

11.

12. **Monitor and assess resettlement outcomes**, their impacts on the standards of living of displaced persons and whether the objectives of the resettlement plan have been achieved by taking into account the baseline conditions and the results of the resettlement monitoring. **Disclose monitoring reports.** 

Source: Asian Development Bank, SPS 2009.

## Outline of a Land Acquisition and Resettlement Plan

1. This outline is part of the Safeguard Requirements. A resettlement plan is required for all projects with involuntary resettlement impacts. The level of detail and comprehensiveness is commensurate with the significance of potential involuntary resettlement impacts and risks. The substantive aspects of the outline will guide the preparation of the resettlement plans, although not necessarily in the order shown. If indigenous people are affected, the plan will identify the risks and include special provisions to mitigate these risks.

## A. Executive Summary

2. This section provides a concise statement of project scope, key survey findings, entitlements, and recommended actions.

## B. Project Description

3. This section provides a general description of the project, discusses project components that result in land acquisition, involuntary resettlement, or both and identify the project area. It also describes the alternatives considered to avoid or minimize resettlement. The section is also to include a table with quantified data and provide a rationale for the final decision.

## C. Scope of Land Acquisition and Resettlement

- 4. This section:
  - (i) discusses the project's potential impacts, and includes maps of the areas or zone of impact of project components or activities;
  - (ii) describes the scope of land acquisition (provide maps) and explains why it is necessary for the main investment project;
  - (iii) summarizes the key effects in terms of assets acquired and displaced persons; and
  - (iv) provides details of any common property resources that will be acquired.

## D. Socioeconomic Information and Profile

5. This section outlines the results of the social impact assessment, the census survey, and other studies, with information and/or data disaggregated by sex, vulnerability, and other social groupings, including:

 define, identify, and enumerate the people and communities to be affected; describe the likely impacts of land and asset acquisition on the people and communities affected taking social, cultural, and economic parameters into account;

- (ii) identify all households (including list of names) eligible for livelihood assistance to support livelihood loss due to delayed land compensation.
- (iii) discuss the project's impacts on the poor, and other vulnerable groups; and
- (iv) identify gender and resettlement impacts, and the socioeconomic situation, impacts, needs, and priorities of women.

# E. Information Disclosure, Consultation, and Participation

- 6. This section:
  - (i) identifies project stakeholders, especially primary stakeholders;
  - (ii) describes the consultation and participation mechanisms to be used during the different stages of the project cycle;
  - (iii) describes the activities undertaken to disseminate project and resettlement information during project design and preparation for engaging stakeholders including women;
  - (iv) summarizes the results of consultations with displaced persons (including host communities), and discusses how concerns raised and recommendations made were addressed in the resettlement plan;
  - (v) confirms disclosure of the draft resettlement plan to displaced persons and includes arrangements to disclose any subsequent plans; and
  - (vi) describes the planned information disclosure measures (including the type of information to be disseminated and the method of dissemination) and the process for consultation with displaced persons during project implementation.

# F. Grievance Redress Mechanisms

7. This section describes mechanisms to receive and facilitate the resolution of displaced persons' concerns and grievances. It explains how the procedures are accessible to displaced persons and provides access to women. It described the terms of reference, operating procedures, protocols outreach program and linkages to the provincial ombudsman's office.

# G. Legal Framework

- 8. This section:
  - describes national and local laws and regulations that apply to the project and identify gaps between local laws and ADB's policy requirements; and discuss how any gaps will be addressed;
  - (ii) describes the legal and policy commitments from the executing agency for all types of displaced persons;
  - (iii) outlines the principles and methodologies used for determining valuations and compensation rates at replacement cost for assets, incomes, and livelihoods; and set out the compensation and assistance eligibility criteria and how and when compensation and assistance will be provided; and
  - (iv) describes the land acquisition process and prepare a schedule for meeting key procedural requirements.
### H. Entitlements, Assistance and Benefits

- 9. This section:
  - (i) defines displaced persons' entitlements and eligibility, and describes all resettlement assistance measures (includes an entitlement matrix);
  - (ii) identify and document the households who will be eligible for transitional livelihood support if compensation payments for land are delayed for six months;
  - (iii) specifies all assistance to vulnerable groups, including women, and other special groups; and.
  - (iv) outlines opportunities for displaced persons to derive appropriate development benefits from the project.

### I. Relocation of Housing and Settlements

- 10. This section:
  - (i) describes options for relocating housing and other structures, including replacement housing, replacement cash compensation, and/or self-selection (ensure that gender concerns and support to vulnerable groups are identified);
  - (ii) describes alternative relocation sites considered; community consultations conducted; and justification for selected sites, including details about location, environmental assessment of sites, and development needs;
  - (iii) provides timetables for site preparation and transfer;
  - (iv) describes the legal arrangements to regularize tenure and transfer titles to resettled persons;
  - (v) outlines measures to assist displaced persons with their transfer and establishment at new sites;
  - (vi) describes plans to provide civic infrastructure; and
  - (vii) explains how integration with host populations will be carried out.

### J. Income Restoration and Rehabilitation

- 11. This section:
  - (i) identifies livelihood risks particularly to vulnerable and indigenous people (if affected) and prepare disaggregated tables based on demographic data and livelihood sources;
  - describes income restoration programs, including multiple options for restoring all types of livelihoods (examples include project benefit sharing, revenue sharing arrangements, joint stock for equity contributions such as land, discuss sustainability and safety nets); outlines measures to provide social safety net through social insurance and/or
    - project special funds;
  - (iii) describes special measures to support vulnerable groups;
  - (iv) explains gender considerations; and
  - (v) describes training programs.

# K. Resettlement Budget and Financing Plan

- 12. This section:
  - (i) provides an itemized budget for all resettlement activities, including for the resettlement unit, staff training, monitoring and evaluation, and preparation of resettlement plans during loan implementation.
  - (ii) describes the flow of funds (the annual resettlement budget should show the budget-scheduled expenditure for key items).
  - (iii) includes a justification for all assumptions made in calculating compensation rates and other cost estimates (taking into account both physical and cost contingencies), plus replacement costs.
  - (iv) includes information about the source of funding for the resettlement plan budget.

# L. Institutional Arrangements

- 13. This section:
  - (ii) describes institutional arrangement responsibilities and mechanisms for carrying out the measures of the resettlement plan;
  - (iii) includes institutional capacity building program, including technical assistance, if required;
  - (iv) describes role of nongovernment organizations (NGOs), if involved, and organizations of displaced persons in resettlement planning and management; and
  - (v) describes how women's groups will be involved in resettlement planning and management,

# M. Implementation Schedule

14. This section includes a detailed, time bound, implementation schedule for all key resettlement and rehabilitation activities. The implementation schedule should cover all aspects of resettlement activities synchronized with the project schedule of civil works construction, and provide land acquisition process and timeline.

# N. Monitoring and Reporting

15. This section describes the mechanisms and benchmarks appropriate to the project for monitoring and evaluating the implementation of the resettlement plan. It specifies arrangements for participation of displaced persons in the monitoring process. This section will also describe reporting procedures.

Involuntary Resettlement Effects	Yes	No	Not Known	Remarks	
Involuntary Acquisition of Land					
1. Will there be land acquisition?					
2. Is the site for land acquisition known?					
3. Is the ownership status and current usage of land to be acquired known?					
4. Will easement be utilized within an existing Right of Way (ROW)?					
5. Will there be loss of shelter and residential land due to land acquisition?					
6. Will there be loss of agricultural and other productive assets due to land acquisition?					
7. Will there be losses of crops, trees, and fixed assets due to land acquisition?					
8. Will there be loss of businesses or enterprises due to land acquisition?					
9. Will there be loss of income sources and means of livelihoods due to land acquisition?					
Involuntary restrictions on land use or on accurate	cess to	legally	designate	ed parks and protected	
10. Will people lose access to natural resources, communal facilities and services?					
11. If land use is changed, will it have an adverse impact on social and economic activities?					
12. Will access to land and resources owned communally or by the area be restricted?					
Information on Displaced Persons:					
Any estimate of the likely number of persons that will be displaced by the Project? [] No [] Yes					
If yes, approximately how many?					
Yes					
Are any displaced persons from indigenous or ethnic minority groups?       [] No       []         Yes       []       []					

# Involuntary Resettlement Impacts Categorization Checklist

Note: The project team may attach additional information on the project, as necessary

# **Environmental Assessment and Review Framework (EARF)**

Project Number: 49038 April 2015

Proposed Loan and Technical Assistance Grant Flood Reconstruction and Resilience Project

In preparing any country program or strategy, financing any project, or by making any designation of or reference to a particular territory or geographic area in this document, the Asian Development Bank does not intend to make any judgments as to the legal or other status of any territory or area.

# **CURRENCY EQUIVALENTS**

(as of 16 April 2015)

Currency Unit	=	Pak Rupees (PKR)
PRs 1.00	=	\$0.01
\$1.00	=	PRs 100

# ABBREVIATIONS

ADB	Asian Development Bank
CAP	Corrective Action Plan
DNA	Damage Needs Assessment
EA	Executing Agency
EARF	Environmental Assessment and Review Framework
EAP	Emergency Assistance Program
EIA	Environmental Impact Assessment
EMP	Environmental Management Plan
ESU	Environment and Social Unit
IA	Implementing Agency
IEE	Initial Environmental Examination
NDMA	National Disaster Management Authority
NGO	Non-governmental Organization
SPS	Safeguard Policy Statement

# WEIGHTS AND MEASURES

km (kilometer)	_	1000 meters
m (meter)		0.001 kilometer

### NOTE

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

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### **APPENDICES**

- Rapid Environmental Assessment (REA) Checklists
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   Major Elements of an Environmental Audit Report

### I. INTRODUCTION

Since September, 2014, heavy monsoon rains and raised water levels in major rivers across Pakistan have claimed the lives of hundreds of people. In Punjab the 2014 floods claimed around 300 lives. Furthermore, more than 83,000 houses were damaged in the province and around 3,000 villages, with around 1 million acres of cropland, were affected. The 2014 flood resulted in approximately \$136.87 million in reconstruction costs of damage to infrastructure in the social and economic sectors of Punjab province, of which over 75% represents damage to the road and irrigation sectors.

The flash floods caused by the heavy monsoon rains that hit Districts Haveli, Poonch and Kotli, among others, in September 2014 are estimated to have affected over 61,900 people. According to the Pakistan Metrological Department, 981 mm of rain fell within a three day period. The floods destroyed community and large scale infrastructure, communications networks, transport networks, and other public and private infrastructure. There were also widespread losses to crops and livestock affecting income and food security of rural populations. Affected populations were primarily situated in Districts Haveli, Poonch and Kotli. Fifty-six people were killed in the floods and nearly 28,000 housing units damaged/destroyed. Furthermore, 4,204 people were temporarily displaced.

The Asian Development Bank (ADB) will support the efforts of the Government of Pakistan (GoP) for rehabilitation and reconstruction of infrastructure in the sectors of transport (primarily roads and bridges) and irrigation (including flood control measures). The assistance will be provided through the Flood Reconstruction and Resilience Project. ADB support would be provided for the rehabilitation and reconstruction of damaged roads, irrigation and flood protection infrastructure, and for supporting disaster risk management and livelihood restoration efforts. Where appropriate the principle of "build-back-better" would apply.

The proposed project will contribute to the economic and social recovery of flood-affected areas through the restoration and reconstruction of critical infrastructure to safer standards. The scope of the proposed project will include:

- (i) Rehabilitation and reconstruction of flood damaged roads and bridges.
- (ii) Rehabilitation and reconstruction of damaged irrigation, drainage and flood protection schemes, and upgrading of priority flood protection schemes.
- (iii) Strengthening disaster risk management through: (i) human and institutional capacity development and strengthening the interface with the districts (downward) and other mandated institutions (horizontal and upwards) that have a key role in flood management; and, (ii) Multi-hazard risk assessment data and system development.

The objective of this EARF is to establish systems and functions that will ensure that conditionalities are built into each initiative at its design stage such that through reconstruction, improved and environmentally sustainable structures are built that have better resistance to natural calamities, particularly floods.

The EARF is endorsed by the GoP and provincial governments, and will be translated and disclosed on the websites of the respective sector agencies in the affected districts and the ADB website.

# II. ASSESSMENT OF LEGAL FRAMEWORK AND INSTITUTIONAL CAPACITY

All subprojects that may be undertaken as part of the Flood Reconstruction and Resilience Project will be screened, classified, and assessed based on ADB's Safeguard Policy Statement (SPS), 2009, and Pakistan's environmental legislation.

Post the adoption of the 18<sup>th</sup> Constitutional Amendment in 2011, the subject of environment has been devolved and the provinces have been empowered for environmental protection and conservation. Subsequently, the Punjab government has amended PEPA 1997 as Punjab Environmental Protection Act 1997 (Amended 2012), and the Environment Protection Department (EPD) Punjab is responsible for ensuring the implementation of provisions of the Act in Punjab's territorial jurisdiction. The Environmental Protection Act, 2000 is the primary environmental legislation in the districts of Haveli, Kotli and Poonch and is implemented by the relevant Environment Protection Agency.

All development initiatives undertaken in Pakistan, according to the Pakistan Environmental Protection Act 1997 (PEPA1997) and provincial environmental legislation are required to undergo an "Initial Environmental Examination" (IEE), or where the project is likely to cause an adverse environmental effect, an "Environmental Impact Assessment" (EIA). The environmental assessment reports are filed with the relevant provincial Environmental Protection Agencies for review and approval prior to project construction.

In order to facilitate the IEE/EIA preparation process the Federal Ministry of Climate Change has provided general policy/guidelines to guide and inform developers regarding preparation of environmental assessment reports. Environmental clearance of ADB is stipulated in the Safeguard Policy Statement (SPS), 2009.

# III. ANTICIPATED ENVIRONMENTAL IMPACTS

# **Description of the Project**

The Flood Reconstruction and Resilience Project will be aimed at the sectors of transport and irrigation. The project will rehabilitate and reconstruct two main types of infrastructure: (i) roads and bridges at the provincial levels; and (ii) irrigation infrastructure at provincial levels. These are briefly discussed below:

- <u>Road and bridges</u>: The floods and rains of 2014 have damaged various categories of roads, railways, bridges, civil airports and telecommunications infrastructure. The Flood Reconstruction and Resilience Project will mainly rehabilitate and reconstruct provincial roads including bridges. In the subprojects identified to date, mostly comprise of rehabilitation of road sections ranging in length from 0.5 km to 50 km for provincial roads. The reconstruction of some bridges is also included.
- <u>Irrigation, drainage and flood protection</u>: The irrigation network that supplied water to about 50,000 hectares of agricultural lands has suffered great damage. For the rehabilitation and reconstruction of provincial irrigation systems, Flood Reconstruction and Resilience Project subprojects will focus on the reconstruction and rehabilitation of schemes damaged by the floods, as well as financing for flood protection works in need of urgent upgrading in preparation for the next flood season.

#### **Environmental Impacts**

It is anticipated that beside significant positive environmental impacts associated with clearance, removal and disposal of debris, reconstruction of roads, and rehabilitation of the irrigation network, the Flood Reconstruction and Resilience Project can potentially have adverse environmental impacts typical for construction and reconstruction projects.

#### Construction Impacts:

Adverse environmental impacts associated with the reconstruction and rehabilitation activities of this emergency intervention relate largely to the construction phase of the individual projects. The degree, magnitude and intensity of the actual impacts will depend upon the nature of the intervention-impact intensity of road construction projects will be very different from the impact intensity associated with irrigation channel rehabilitation.

Broadly, the impacts stemming from construction activities can be of the following types:

- Soil Erosion and Dust Emissions: Construction activities will involve vegetation clearing, land excavation, quarrying, cut and fills, asphalt machine operation, formation of windrows, stockpiles of gravel etc. All of these, if not performed carefully can result in soil erosion in arid areas. They activities can cause soil to dislodge and increase the rate of soil loss from an area beyond that occurring under natural conditions. This movement of soil will also give rise to dust emissions. Therefore, it will be necessary to introduce intensity specific mitigation measures to counter the impacts of soil erosion and dust emissions.
- Noise Levels: The operation of heavy equipment on construction sites such as excavators, diggers, bulldozers, dumper trucks, rollers, stone crushers and controlled rock blasting result in noise generated well above the ambient noise levels in rural areas. It is important to introduce noise control measures as part of the construction stage mitigation measure to bring construction noise levels down to an acceptable level. Background ambient noise levels will need to be measured, and then compared with typical values for noise generated by construction equipment.
- **Groundwater Quantity:** Despite devastating floods in Pakistan, water resources, especially ground water remain scarce in various parts of the country. If groundwater is identified as sensitive in the area where the subproject is to be located, then it is important to develop mitigation measures that restrict and monitor abstraction to obliterate the possibility of over exploitation.
- Soil and Groundwater Quality: With large scale construction activities where heavy machinery is operated, soil contamination by oil and chemical leaks has a significant probability of occurrence. Groundwater contamination by construction wastes and medium scale spills is also possible. The subprojects will need to factor in this probability and develop systems and mechanisms to handle such incidents, including the final disposal of contaminated soil, and containment of contaminants in groundwater.

Drainage: The drainage patterns in areas may have been damaged by the accumulation of debris and heavy silt. It is important to develop mitigation measures that ensure that the new construction does not disrupt the natural drainage patterns of the area.

The following general criteria will be adopted for selection of the subprojects under the Flood Reconstruction and Resilience Project:

- (i) The subprojects shall only be selected from the list of projects prioritized by the Government;
- (ii) The subprojects shall only involve activities that follow all the government regulations;
- (iii) Types of projects listed in ADB SPS's Appendix 5 (ADB Prohibited Investment Activities List) do not qualify for ADB's financing; and
- (iv) The subprojects that can have considerable adverse impacts to the environment or located in environmentally sensitive areas are subject to mandatory environmental assessment as detailed below.

A final check on conformity with the selection criteria will be the submission of selected subprojects for ADB's clearance. Any subproject, which does not meet the general criteria listed above may be rejected.

All subprojects will be subjected to the environmental assessment process. This is a process of environmental analysis and planning to address the environmental impacts and risks associated with a project. The Flood Reconstruction and Resilience Project has been categorized as Environment Category B. However, there is a likelihood that future subprojects may fall under Environment Category A. Such high risk subprojects (Category A) will require a full-scale environmental impact assessment (EIA). In view of the large number of subprojects in the irrigation and road sectors, and the limited nature of their environmental impacts, a sectoral IEE may be considered.

All environmental assessments will follow ADB's disclosure requirements. However, since this is an emergency assistance program, for projects requiring immediate and urgent execution that may be Category A, the 120 days EIA disclosure requirement prior to board approval will be changed to 120 days disclosure prior to the release of funds for the subproject.

For subprojects proposed for Retroactive Financing, an environmental screening will be carried out through REA checklists, based on which it will be decided whether a detailed environmental audit is required. If the audit is carried out, an environmental audit report will be prepared and submitted to ADB for approval. The outline of a typical environmental audit report is attached as Appendix 3.

### **Requirements to Environmental Screening and Classification**

All subprojects will be screened to determine their environmental category based on the ADB's Rapid Environmental Assessment (REA) Checklist. Templates of the REA for subprojects that may fall across the selected sectors (road transport, irrigation and flood management) are attached in Appendix 1. Categorization is to be based on the most environmentally sensitive component, which implies that if any one component of a subproject has potential of significant adverse environmental impacts, then the project is to be classified as Category A regardless of potential environmental impacts of other aspects of the project. In general, a project will be classified as 'Category A' if the project:

(i) has a significant level of environmental impacts requiring complex mitigation measures needing to be prepared through an in depth assessment of the impacts and detailed study for preparing mitigation measures; and

(ii) has a significant level of environmental impacts requiring complex mitigation measures needing to be prepared through an in depth assessment of the impacts and detailed study for preparing mitigation measures; and

Other infrastructure rehabilitation subprojects that do not fall into the above category are typically classified as Category B or C depending upon the scale of impacts.

#### **Requirements for Environmental Assessments and Environmental Management Plans**

It is expected that the majority of subprojects will involve the rehabilitation or reconstruction of damaged infrastructure at its existing location. However, in some instances there may be a requirement to relocate infrastructure to new locations. In these instances the EA/IA will identify potential direct, indirect, cumulative and induced environmental impacts on and risks to physical, biological, socioeconomic, and physical cultural resources and determine their significance and scope, in consultation with stakeholders, including affected people. If potentially adverse environmental impacts and risks are identified, the EA/IA will undertake an environmental assessment as early as possible in the project cycle. For subprojects with potentially significant adverse impacts that are diverse, irreversible, or unprecedented, the EA/IA will examine alternatives to the project's location, design, technology, and components that would avoid, and, if avoidance is not possible, minimize adverse environmental impacts and risks. The rationale for selecting the particular subproject location, design, technology, and components will be properly documented, including, cost-benefit analysis, taking environmental costs and benefits of the various alternatives considered into account. The "no action" alternative will be also considered.

Impacts and risks will be analyzed in the context of each subproject's area that encompasses:

- (i) the primary subproject site(s) and related facilities;
- (ii) associated facilities that are not funded as part of the Flood Reconstruction and Resilience Project, and whose viability and existence depend exclusively on the subproject and whose goods or services are essential for successful operation of the subproject;
- (iii) areas and communities potentially affected by cumulative impacts of the Flood Reconstruction and Resilience Project, and other sources of similar impacts in the geographical area; and
- (iv) Areas and communities potentially affected by impacts from unplanned but predictable developments caused by the subproject that may occur later or at a different location.

Environmental impacts and risks will also be analyzed for all relevant stages of the project cycle, including preconstruction, construction, operations, decommissioning, and post-closure activities such as rehabilitation or restoration.

The EA/IA will prepare an Environmental Management Plan (EMP) that addresses the potential impacts and risks identified by the environmental assessment. The EMP will include the proposed mitigation measures, environmental monitoring and reporting requirements, emergency response procedures, related institutional or organizational arrangements, capacity development and training measures, implementation schedule, cost estimates, and performance indicators.

Since the Flood Reconstruction and Resilience Project is being administered as an emergency assistance, there will be a need to implement subprojects, particularly in the irrigation and flood protection sector, on an urgent basis before the onset of monsoon rains. A review of available information on these subprojects suggests that they are of a similar nature and will not have extensive or severe environmental impacts. Hence, based on environmental screening through REA checklists, sectoral (generic) IEEs may be prepared for such subprojects. However, where the REA checklists indicate environmental impacts of a serious nature, a detailed IEE will be carried out. The same environmental assessment and management procedure will also be employed for provincial and district road rehabilitation and reconstruction projects.

The EA/IA should ensure that ADB be given access to undertake environmental due diligence for all subprojects. However, the EA/IA has the main responsibility for undertaking environmental due diligence and monitoring the implementation of environmental mitigation measures for all subprojects. The due diligence report as well as monitoring reports on implementation of the environmental management plan needs to be documented systematically and be available to the public.

### CONSULTATION, INFORMATION DISCLOSURE, AND GRIEVANCE REDRESS MECHANISM

# A. Public Consultation

Although the Flood Reconstruction and Resilience Project subprojects will be undertaken for the welfare of the communities, to rehabilitate, or reconstruct important infrastructure, it is still likely that the environment, communities and immediate stakeholders may be affected by the reconstruction exercise. In cases, infrastructure may need to be constructed along new alignments, thereby, disturbing habitat that was previously not affected. In order to minimize any impacts on the already marginalized communities and the environment rendered fragile by the devastating floods, it is important to involve communities in the reconstruction process through a system of consultation. Consultation will be based on the following principles:

- (i) Early start in the individual project preparation stage and continuation throughout the project cycle;
- (ii) Timely disclosure of relevant information in a comprehensible and readily accessible to affected people format;
- (iii) Ensuring the absence of intimidation or coercion during public consultation;
- (iv) Gender inclusive and responsive with focus on disadvantaged and vulnerable groups, and
- (v) Enabling the integration of all relevant views of affected people and stakeholders into decision-making.

# B. Information Disclosure

Overall responsibility for ensuring that the environmental requirements of the Project set forth in ADB's Safeguard Policy Statement 2009, PEPA 1997 and provincial environmental legislation lies with the relevant EA/IA implementing the individual projects.

• All environmental documents are subject to public disclosure, and are therefore to be made available to public;

- All environmental assessment documentation for Category B subprojects (IEEs) will be posted on the ADB website;
- Under the SPS (2009), If any Category A subprojects are identified, the first working Draft EIA is to be prepared, and posted on the ADB website 120 days before board approval. However, as this is an emergency assistance project, there may be an urgency to implement a selected subproject. In such a case, the Draft EIA may be prepared and posted on ADB's website 120 days prior to release of funding.
- All IEE/EIAs have to be reviewed by ADB before being disclosed to the public; and,
- The Government will ensure that meaningful public consultations are undertaken during the assessment process for the subprojects.

### C. Grievance Redress Mechanism

Since theFlood Reconstruction and Resilience Project centers around displaced families, destroyed infrastructure and lost livelihoods, it is anticipated that there will be complaints from the communities at various levels pertaining to the environmental impacts of the infrastructure being rehabilitated or reconstructed.

Field level grievances will be addressed through a local Grievance Redress Committee (GRC) to be formally constituted by the EA/IA. GRCs will be instituted under the relevant Project Management Unit (PMU). The GRC will include the Environment and Social Unit's (ESU) Environment Specialist in addition to a specially recruited grievance officer and a local notable. The GRCs will be formally notified and established at the project sites, and will function as open forums for hearing complaints and exploring quick resolutions to resolving conflicts. Each GRC will record its deliberations and inform the concerned parties of a resolution within 2 weeks of its findings and recommendations. Communities will be informed about the GRC through the ESU outreach program. Additionally Environmental Tribunals exist at the provincial level and can be approached for the resolution of conflicts and grievances that cannot be resolved by the GRC. Grievance may also be addressed to ADB's Office of Special Projects Facilitator.

### IV. INSTITUTIONAL ARRANGEMENT AND RESPONSIBILITIES

#### Institutional Arrangements and Responsibilities

Institutional arrangements and responsibilities for various categories of subprojects are detailed below.

Districts Haveli, Poonch and Kotli:The Planning and Development (P&D) Department will be the overall Executing Agency (EA) for this portion of the project and also the implementing agency (IA) for the DRM strengthening component of the project. The other IA will be the Communication and Works (C&W) Department for reconstruction of the district roads (and bridges) component, and would also be responsible for the respective cash-for-work efforts linked to the roads and bridges reconstruction, and surveys and landslides works that they undertake in their respective components.The EA will establish a project steering committee (PSC) to provide policy direction and strategic oversight, and inter-agency coordination.

A project coordination unit (PCU) will be established that will have two distinct functions -- one as an EA and one as an IA. As an EA it will have the overall responsibility for planning, coordination, monitoring, overall reporting and approval of subprojects and activities according

to the selection criteria, relating to disaster risk management support; and provincial and districts roads. The PCU at the P&D will be headed by a dedicated Director General, supported by staff deputed from C&W, Irrigation, Land Use Planning, Forestry and SDMA.

The implementation arrangement at the IA level will use the existing capacities of the respective IAs as much as possible. The C&W will establish a lean Project Implementation Unit (PIU) headed by a full-time Project Director from existing staff, supported by dedicated core staff responsible for coordination, financial control, record keeping, payments, procurements, safeguards and reporting. The existing field formation of these departments through the Executive Engineers in the affected districts will sign the work and supply contracts related to their area of responsibility and will be responsible for implementation, contract administration and payment certification, supported by third party resident or top supervision consultants hired by the PIU. The PCU at the P&D as an IA will implement the second component of the project through the deputed staff from C&W, Irrigation, Land Use Planning, Forestry and SDMA.

Punjab: The Planning and Development Department (P&D) of the GoPb is the Executing Agency (EA) for the project, and the implementing agencies (IAs) are the PID for the irrigation, drainage, and flood risk management components; C&W for provincial and district roads; and PDMA for provincial disaster risk management support component. The PID and C&W will also be responsible for the respective cash-for-work efforts linked to their respective components. The EA will establish a project steering committee (PSC) to provide policy direction and strategic oversight, and inter-agency coordination.

The P&D will have the overall responsibility for planning, monitoring, project progress review, coordinating with line departments/agencies and the Federal Government for approval of the umbrella project by the Central Development Working Party (CDWP). However, the approval of subprojects and related activities according to the selection criteria relating to irrigation, drainage, flood protection, provincial disaster management support, and provincial and district roads will be the responsibility of respective competent approval forum, i.e. DDC/DDWP/DDSC/PDWP. The Project Coordination Unit (PCU)at the P&D will be headed by the Member Infrastructure, supportedby existing Chief of section related to irrigation and roads. However, Chief DRM responsibilities will be carried out by the Chief, Irrigation until a Chief DRM position can be established.

The implementation arrangements at the IA level will also use the existing capacities of the respective IA's as much as possible. The PID and C&W will establish a lean Project Implementation Unit (PIU) headed by a full-time Project Director from existing staff, supported by dedicated core staff responsible for coordination, financial control, record keeping, payments, procurements, safeguards and reporting The PIU at the PDMA will have 4 existing staff members headed by the existing Director General. All PIUs will be supported by staff provided through dedicated TA attached to the project in areas of procurement, financial control and safeguards.

A separate Environment and Social Unit (ESU) will be established within each EA/IA's Project Management Unit (PMU) in the office of the Project Director (PD). The ESU will appoint a Director, Social and Environment Safeguards, and an Environment Specialist. Environmental management and monitoring tasks will be supported by consultants. The PMU will ensure that all subprojects comply with ADB's Safeguard Policy Statement (2009) and PEPA 1997.

#### The ESU will be responsible for:

- Appointing an environment specialist to monitor the implementation of environmental management measures required for each subproject.
- Preparing environmental screening checklists and classifying subprojects that have not been yet classified
- Based on the checklist and as per ADB SPS (2009) and PEPA 1997 requirements, preparing IEEs and EMPs.
- Submitting the checklists and IEE reports to ADB as part of the approval of subproject.
- Ensuring that EMPs are included in Tender documents.
- Ensuring that all regulatory clearances are obtained before starting civil works for the subproject.
- Ensuring that the EMPs, including all proposed mitigation measures and monitoring programs are properly implemented.
- Undertaking monitoring of subprojects and preparing environmental monitoring reports every six months (in case of projects with long duration) and post-project reports (for shorter projects), to be delivered to ADB.
- In the case of unpredicted environmental impacts occurring during project implementation, preparing and implementing a Corrective Action Plan (CAP).
- In case of subprojects with significant environmental impacts, having an IEE report (for category B) (outline of an environmental assessment report is attached as Appendix 2), including an EMP prepared for public disclosure.
- In the case that a Category B subproject needs to have its siting or alignment changed or its environmental classification reconfirmed, reviewing it to determine whether a supplementary study is required. If so, carry out the study and implement any amendments to the original EMP.
- Preparing a project specific EMP for the operations that includes a sub-plan for each of the work areas.
- Providing awareness training in environmental management for all employees working on the subproject.
- Ensuring that meaningful public consultations (including both men and women) are undertaken with affected groups and local NGOs. The list of people attending the consultation, time and locations, subjects discussed during consultation will be recorded in a systematic manner.
- Retroactive financing In the case of subprojects identified for Retroactive financing, carrying out environmental audits (including screening, site visits, and review of tender documents) to ensure that ADB's environmental safeguard requirements have been met, and preparing environmental audit reports.
- Sharing information and disclosure of environmental safeguard documents (including any Corrective Action Plans prepared in cases of change to original project design) as required.

### ADB will take the following responsibilities:

• In case of IEEs review them as a basis for the approval of subprojects.

- Publicly disclose the final IEE before project appraisal, a new or updated IEE and corrective action plan prepared during project implementation, if any, as well as environmental monitoring reports on the ADB website.
- Monitor the implementation of the EMP and due diligence as part of overall project review mission.
- Provide assistance to the EA/IA, if required, in carrying out its responsibilities and safeguard capacity building.

### Staffing Requirements and Budget

Consultant support for environmental management and monitoring will be provided to enhance the existing resources of each of the EA/IA. One Environmental Specialist will be based in each of the Environment and Social Units (ESUs) of the respective PMUs.

The project's costs will incorporate a budget and resources needed to (i) implement the environmental review and screening procedure, (ii) undertake the environmental assessment studies for the subprojects, (iii) monitor the implementation of EMPs, and (iv) undertake environmental mitigation measures as required.

The cost of conducting training, undertaking monitoring, procuring laboratory equipment, hiring environmental consultants, and implementing the environmental impact assessment and review framework will also be incorporated in the project.

### V. MONITORING AND REPORTING

The extent of monitoring activities, including their scope and periodicity, will be commensurate with the project's risks and impacts. The EA/IA is required to implement safeguard measures and relevant safeguard plans, as provided in the legal agreements, and to submit periodic monitoring reports on their implementation performance. ADB will require the IEA/IA to:

- (i) establish and maintain procedures to monitor the progress of implementation of EMPs;
- (ii) verify the compliance with environmental measures and their progress toward intended outcomes;
- (iii) document and disclose monitoring results and identify necessary corrective and preventive actions in the periodic monitoring reports;
- (iv) follow up on these actions to ensure progress toward the desired outcomes,
- (v) retain qualified and experienced external experts or qualified NGOs to verify monitoring information for projects with significant impacts and risks;
- (vi) use independent advisory panels to monitor project implementation for highly complex and sensitive projects, and
- (vii) Submit periodic monitoring reports on safeguard measures as agreed with ADB.

ADB will carry out the following monitoring actions to supervise subprojects implementation:

(i) conduct periodic site visits for projects with adverse environmental or social impacts;

- (ii) conduct supervision missions with detailed review by ADB's safeguard specialists/officers or consultants for subprojects with significant adverse social or environmental impacts;
- (iii) review the periodic monitoring reports submitted by the EA/IA to ensure that adverse impacts and risks are mitigated as planned and as agreed with ADB;
- (iv) work with the EA/IA to rectify to the extent possible any failures to comply with their safeguard commitments, as covenanted in the legal agreements, and exercise remedies to reestablish compliance as appropriate; and
- (v) Prepare project completion reports that assess whether the objective and desired outcomes of the EMPs have been achieved, taking into account the baseline conditions and the results of monitoring.

### Appendix 1

#### **Rapid Environmental Assessment (REA) Checklist**

#### Instructions:

- (i) The project team completes this checklist to support the environmental classification of a project. It is to be attached to the environmental categorization form and submitted to the Environment and Safeguards Division (RSES) for endorsement by the Director, RSES and for approval by the Chief Compliance Officer.
- (ii) This checklist focuses on environmental issues and concerns. To ensure that social dimensions are adequately considered, refer also to ADB's (a) checklists on involuntary resettlement and Indigenous Peoples; (b) poverty reduction handbook; (c) staff guide to consultation and participation; and (d) gender checklists.
- (iii) Answer the questions assuming the "without mitigation" case. The purpose is to identify potential impacts. Use the "remarks" section to discuss any anticipated mitigation measures.

Country/Project Title:	
Sector Division:	

Screening Questions	Yes	No	Remarks
A. PROJECT SITING IS THE PROJECT AREA ADJACENT TO OR WITHIN ANY OF THE FOLLOWING ENVIRONMENTALLY SENSITIVE AREAS?			
PROTECTED AREA			
WETLAND			
MANGROVE			
<ul> <li>ESTUARINE</li> </ul>			
<ul> <li>BUFFER ZONE OF PROTECTED AREA</li> </ul>			
<ul> <li>SPECIAL AREA FOR PROTECTING BIODIVERSITY</li> </ul>			
<b>B. POTENTIAL ENVIRONMENTAL IMPACTS</b> WILL THE PROJECT CAUSE			
<ul> <li>loss of precious ecological values (e.g. result of encroachment into forests/swamplands or historical/cultural buildings/areas, disruption of hydrology of natural waterways, regional flooding, and drainage hazards)?</li> </ul>			
<ul> <li>conflicts in water supply rights and related social conflicts?</li> </ul>			
Impediments to movements of people and animals?			

Screening Questions	Yes	No	Remarks
<ul> <li>potential ecological problems due to increased soil erosion and siltation, leading to decreased stream capacity?</li> </ul>			
<ul> <li>Insufficient drainage leading to salinity intrusion?</li> </ul>			
<ul> <li>over pumping of groundwater, leading to salinization and ground subsidence?</li> </ul>			
<ul> <li>impairment of downstream water quality and therefore, impairment of downstream beneficial uses of water?</li> </ul>			
<ul> <li>dislocation or involuntary resettlement of people?</li> </ul>			
<ul> <li>disproportionate impacts on the poor, women and children, Indigenous Peoples or other vulnerable groups?</li> </ul>			
<ul> <li>potential social conflicts arising from land tenure and land use issues?</li> </ul>			
soil erosion before compaction and lining of canals?			
noise from construction equipment?			
• dust during construction?			
<ul> <li>waterlogging and soil salinization due to inadequate drainage and farm management?</li> </ul>			
<ul> <li>leaching of soil nutrients and changes in soil characteristics due to excessive application of irrigation water?</li> </ul>			
<ul> <li>reduction of downstream water supply during peak seasons?</li> </ul>			
<ul> <li>soil pollution, polluted farm runoff and groundwater, and public health risks due to excessive application of fertilizers and pesticides?</li> </ul>			
soil erosion (furrow, surface)?			
scouring of canals?			
<ul> <li>clogging of canals by sediments?</li> </ul>			
<ul> <li>clogging of canals by weeds?</li> </ul>			
seawater intrusion into downstream freshwater systems?			
<ul> <li>introduction of increase in incidence of waterborne or water related diseases?</li> </ul>			
<ul> <li>dangers to a safe and healthy working environment due to physical, chemical and biological hazards during project construction and operation?</li> </ul>			

Screening Questions	Yes	No	Remarks
<ul> <li>large population influx during project construction and operation that causes increased burden on social infrastructure and services (such as water supply and sanitation systems)?</li> </ul>			
<ul> <li>social conflicts if workers from other regions or countries are hired?</li> </ul>			
<ul> <li>risks to community health and safety due to the transport, storage, and use and/or disposal of materials such as explosives, fuel and other chemicals during construction and operation?</li> </ul>			
<ul> <li>community safety risks due to both accidental and natural hazards, especially where the structural elements or components of the project (e.g., irrigation dams) are accessible to members of the affected community or where their failure could result in injury to the community throughout project construction, operation and decommissioning?</li> </ul>			

<b>Climate Change and Disaster Risk Questions</b> The following questions are not for environmental categorization. They are included in this checklist to help identify potential climate and disaster risks.	Yes	Νο	Remarks
<ul> <li>Is the Project area subject to hazards such as earthquakes, floods, landslides, tropical cyclone winds, storm surges, tsunami or volcanic eruptions and climate changes (see Appendix I)</li> </ul>			
<ul> <li>Could changes in temperature, precipitation, or extreme events patterns over the Project lifespan affect technical or financial sustainability (e.g., increased glacial melt affect delivery volumes of irrigated water; sea level rise increases salinity gradient such that source water cannot be used for some or all of the year).</li> </ul>			
Are there any demographic or socio-economic aspects of the Project area that are already vulnerable (e.g., high incidence of marginalized populations, rural-urban migrants, illegal settlements, ethnic minorities, women or children)?			
<ul> <li>Could the Project potentially increase the climate or disaster vulnerability of the surrounding area (e.g., by diverting water in rivers that further increases salinity upstream, or encouraging settlement in earthquake zones)?</li> </ul>			

Note: Hazards are potentially damaging physical events.

### Appendix I: Environments, Hazards and Climate Changes

Environment	Natural Hazards and Climate Change	Example Impact on Irrigation Systems
Arid/Semi-	Low erratic rainfall of up to 500 mm rainfall per annum with periodic droughts and	In cases where water availability may
arid&desertenvironments	high rainfall variability. Low vegetative cover. Resilient ecosystems & complex	decreases due to reduced precipitation,
	pastoral and systems, but medium certainty that 10-20% of dry lands degraded; 10-	increased water use may be unsustainable
	30% projected decrease in water availability in next 40 years; projected increase in	
	drought duration and severity under climate change. Increased mobilization of sand	
	dunes and other soils as vegetation cover declines; likely overall decrease in	
	agricultural productivity, with rain-fed agriculture yield reduced by 30% or more by	
	2020. Earthquakes and other geophysical hazards may also occur in these	
	environments.	
Humid and sub-humid	More than 500 mm precipitation/yr. Resilient ecosystems & complex human pastoral	In many cases, climate change is expected
plains, foothills and hill	and cropping systems. 10-30% projected decrease in water availability in next 40	to result in more intense but less frequent
country	years; projected increase in droughts, neat waves and floods; increased erosion of	raintal events and longer dry seasons and
	loess-mantied landscapes by wind and water; increased guily erosion; landslides	water capture systems may not be designed
	likely on sleeper slopes. Likely overall decrease in agricultural productivity &	to accommodate these changes.
	by 30% or more by 2020. Increased incidence of forest and agriculture based incort	
	infestations. Earthquakes and other geophysical hazards may also occur in these	
	environments	
River valleys/deltas and	River basins, deltas and estuaries in low-lying areas are vulnerable to riverine floods	As temperature increases the spread of
estuaries and other low-	storm surges associated with tronical cyclones/typhoons and sea level rise: natural	vector and water borne diseases may
lving coastal areas	(and human-induced) subsidence resulting from sediment compaction and ground	spread, standing water created by irrigation
	water extraction: liquefaction of soft sediments as result of earthquake ground	systems may promote their spread by
	shaking. Tsunami possible/likely on some coasts. Lowland agri-business and	creating habitats for their transmission.
	subsistence farming in these regions at significant risk.	<u> </u>
Small islands	Small islands generally have land areas of less than 10,000km <sup>2</sup> in area, though	Areas previously suitable for agriculture may
	Papua New Guinea and Timor with much larger land areas are commonly included in	become less so as sea-level rise causes salt
	lists of small island developing states. Low-lying islands are especially vulnerable to	water intrusion and soil salinity. Planned
	storm surge, tsunami and sea-level rise and, frequently, coastal erosion, with coral	agricultural areas may no longer be viable
	reefs threatened by ocean warming in some areas. Sea level rise is likely to threaten	and therefore irrigation systems that feed
	the limited ground water resources. High islands often experience high rainfall	them.
	intensities, frequent landslides and tectonic environments in which landslides and	
	earthquakes are not uncommon with (occasional) voicanic eruptions. Small islands	
Mountain accountance	may have low adaptive capacity and high adaptation costs relative to GDP.	Irrigation infrastructure may be domaged and
Mountain ecosystems	Accelerated gracial melting, rock rais/randsides and gracial rake outputst noous,	highlight hy glasial lake outbursts and
	eduling to increased debris nows, river bank erosion and noods and more extensive	mudflows Water resources supplied by
	Enhanced show melt and fluctuating stream flows may produce seasonal floods and	mountain systems may increase or diminish
	droughts Melting of permatrost in some environments. Faunal and floral species	as rates of diacial melt change
	migration Farthquakes landslides and other geophysical bazards may also occur in	as rates of glacial ment change.
	these environments.	

Environment	Natural Hazards and Climate Change	Example Impact on Irrigation Systems
Volcanic environments	Recently active volcanoes (erupted in last 10,000 years – see <u>www.volcano.si.edu</u> ). Often fertile soils with intensive agriculture and landslides on steep slopes. Subject to earthquakes and volcanic eruptions including pyroclastic flows and mudflows/lahars and/or gas emissions and occasionally widespread ash fall.	Irrigation infrastructure may be lost during volcanic eruptions.

#### **Rapid Environmental Assessment (REA) Checklist**

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- (ii) This checklist focuses on environmental issues and concerns. To ensure that social dimensions are adequately considered, refer also to ADB's (a) checklists on involuntary resettlement and Indigenous Peoples; (b) poverty reduction handbook; (c) staff guide to consultation and participation; and (d) gender checklists.
- (iii) Answer the questions assuming the "without mitigation" case. The purpose is to identify potential impacts. Use the "remarks" section to discuss any anticipated mitigation measures.

Country/Project Title:
Sector Division:

Screening Questions	Yes	No	Remarks
A. PROJECT SITING IS THE PROJECT AREA ADJACENT TO OR WITHIN ANY OF THE FOLLOWING ENVIRONMENTALLY SENSITIVE AREAS?			
CULTURAL HERITAGE SITE			
PROTECTED AREA			
WETLAND			
MANGROVE			
<ul> <li>ESTUARINE</li> </ul>			
<ul> <li>BUFFER ZONE OF PROTECTED AREA</li> </ul>			
SPECIAL AREA FOR PROTECTING BIODIVERSITY			
<b>B. POTENTIAL ENVIRONMENTAL IMPACTS</b> WILL THE PROJECT CAUSE			
<ul> <li>Encroachment on historical/cultural areas; disfiguration of landscape by road embankments, cuts, fills, and quarries?</li> </ul>			
<ul> <li>Encroachment on precious ecology (e.g. sensitive or protected areas)?</li> </ul>			
<ul> <li>Alteration of surface water hydrology of waterways crossed by roads, resulting in increased sediment in streams affected by increased soil erosion at construction site?</li> </ul>			

Screening Questions	Yes	No	Remarks
<ul> <li>deterioration of surface water quality due to silt runoff and sanitary wastes from worker-based camps and chemicals used in construction?</li> </ul>			
<ul> <li>increased local air pollution due to rock crushing, cutting and filling works, and chemicals from asphalt processing?</li> </ul>			
<ul> <li>risks and vulnerabilities related to occupational health and safety due to physical, chemical, biological, and radiological hazards during project construction and operation during project construction and operation?</li> </ul>			
<ul> <li>noise and vibration due to blasting and other civil works?</li> </ul>			
<ul> <li>dislocation or involuntary resettlement of people?</li> </ul>			
<ul> <li>dislocation and compulsory resettlement of people living in right-of-way?</li> </ul>			
<ul> <li>disproportionate impacts on the poor, women and children, Indigenous Peoples or other vulnerable groups?</li> </ul>			
<ul> <li>other social concerns relating to inconveniences in living conditions in the project areas that may trigger cases of upper respiratory problems and stress?</li> </ul>			
<ul> <li>hazardous driving conditions where construction interferes with pre-existing roads?</li> </ul>			
<ul> <li>poor sanitation and solid waste disposal in construction camps and work sites, and possible transmission of communicable diseases (such as STI's and HIV/AIDS) from workers to local populations?</li> </ul>			
<ul> <li>creation of temporary breeding habitats for diseases such as those transmitted by mosquitoes and rodents?</li> </ul>			
<ul> <li>accident risks associated with increased vehicular traffic, leading to accidental spills of toxic materials?</li> </ul>			
<ul> <li>increased noise and air pollution resulting from traffic volume?</li> </ul>			
<ul> <li>increased risk of water pollution from oil, grease and fuel spills, and other materials from vehicles using the road?</li> </ul>			
<ul> <li>social conflicts if workers from other regions or countries are hired?</li> </ul>			
<ul> <li>large population influx during project construction and operation that causes increased burden on social infrastructure and services (such as water supply and sanitation systems)?</li> </ul>			

Screening Questions	Yes	No	Remarks
<ul> <li>risks to community health and safety due to the transport, storage, and use and/or disposal of materials such as explosives, fuel and other chemicals during construction and operation?</li> </ul>			
<ul> <li>community safety risks due to both accidental and natural causes, especially where the structural elements or components of the project are accessible to members of the affected community or where their failure could result in injury to the community throughout project construction, operation and decommissioning.</li> </ul>			

<b>Climate Change and Disaster Risk Questions</b> The following questions are not for environmental categorization. They are included in this checklist to help identify potential climate and disaster risks.	Yes	No	REMARKS
<ul> <li>Is the Project area subject to hazards such as earthquakes, floods, landslides, tropical cyclone winds, storm surges, tsunami or volcanic eruptions and climate changes (see Appendix I)</li> </ul>			
<ul> <li>Could changes in temperature, precipitation, or extreme events patterns over the Project lifespan affect technical or financial sustainability (e.g., increased erosion or landslides could increase maintenance costs, permafrost melting or increased soil moisture content could affect sub0-grade).</li> </ul>			
<ul> <li>Are there any demographic or socio-economic aspects of the Project area that are already vulnerable (e.g., high incidence of marginalized populations, rural-urban migrants, illegal settlements, ethnic minorities, women or children)?</li> </ul>			
<ul> <li>Could the Project potentially increase the climate or disaster vulnerability of the surrounding area (e.g., by encouraging settlement in areas that will be more affected by floods in the future, or encouraging settlement in earthquake zones)?</li> </ul>			

Note: Hazards are potentially damaging physical events.

#### Appendix I: Environments, Hazards and Climate Changes

Environment	Natural Hazards and Climate Change	Example Impact on Roads and Highways
Arid/Semi-arid and desert environment	Low erratic rainfall of up to 500 mm rainfall per annum with periodic droughts and high rainfall variability. Low vegetative cover. Resilient ecosystems & complex pastoral and systems, but medium certainty that 10–20% of dry lands degraded; 10-30% projected decrease in water availability in next 40 years; projected increase in drought duration and severity under climate change. Increased mobilization of sand dunes and other soils as vegetation cover declines; likely overall decrease in agricultural productivity, with rain-fed agriculture yield reduced by 30% or more by 2020. Earthquakes and other geophysical hazards may also occur in these environments.	Reduced availability of water for compaction during construction, increased sand on carriageways reduce road safety, road alignment may need to be reviewed where, for example, agriculturally productive zones are shifting.
Humid and sub-humid plains, foothills and hill country	More than 500 mm precipitation/yr. Resilient ecosystems & complex human pastoral and cropping systems. 10-30% projected decrease in water availability in next 40 years; projected increase in droughts, heat waves and floods; increased erosion of loess-mantled landscapes by wind and water; increased gully erosion; landslides likely on steeper slopes. Likely overall decrease in agricultural productivity & compromised food production from variability, with rainfed agriculture yield reduced by 30% or more by 2020. Increased incidence of forest and agriculture-based insect infestations. Earthquakes and other geophysical hazards may also occur in these environments.	Increased landslides and mudflows disrupt road networks, Increased moisture content in the subsurface can result in increased penetration of water into the fill, which may also collapse, Reduced effectiveness of drainage which results in a reduction in the bearing capacity of the soils which become saturated
River valleys/ deltas and estuaries and other low-lying coastal areas	River basins, deltas and estuaries in low-lying areas are vulnerable to riverine floods, storm surges associated with tropical cyclones/typhoons and sea level rise; natural (and human- induced) subsidence resulting from sediment compaction and ground water extraction; liquefaction of soft sediments as result of earthquake ground shaking. Tsunami possible/likely on some coasts. Lowland agri-business and subsistence farming in these regions at significant risk.	Same as above
Small islands	Small islands generally have land areas of less than 10,000km <sup>2</sup> in area, though Papua New Guinea and Timor with much larger land areas are commonly included in lists of small island developing states. Low-lying islands are especially vulnerable to storm surge, tsunami and sea-level rise and, frequently, coastal erosion, with coral reefs threatened by ocean warming in some areas. Sea level rise is likely to threaten the limited ground water resources. High islands often experience high rainfall intensities, frequent landslides and tectonic environments in which landslides and earthquakes are not uncommon with (occasional) volcanic eruptions. Small islands may have low adaptive capacity and high adaptation costs relative to GDP.	Increased salinity increases corrosion of materials which can break-down, Road is eroded by increased wave action, Increased flooding from overtopping of sea-water over road or salt-water intrusion in to groundwater,
Mountain ecosystems	Accelerated glacial melting, rock falls/landslides and glacial lake outburst floods, leading to increased debris flows, river bank erosion and floods and more extensive outwash plains and, possibly, more frequent wind erosion in intermundane valleys. Enhanced snow melt and fluctuating stream flows may produce seasonal floods and droughts. Melting of permafrost in some environments. Faunal and floral species migration. Earthquakes, landslides and other geophysical hazards may also occur in these environments.	Damage to infrastructure from landslides and mudflows, permafrost melting causes damage to roads, glacial lake outbursts wash out river-crossings.
Volcanic environments	Recently active volcanoes (erupted in last 10,000 years – see <u>www.volcano.si.edu</u> ). Often fertile soils with intensive agriculture and landslides on steep slopes. Subject to earthquakes and volcanic eruptions including pyroclastic flows and mudflows/lahars and/or gas emissions and occasionally widespread ash fall.	Damage and loss of roads, in secuirity for road works crew and maintenance

### Appendix 2

#### **Outline of an Environmental Assessment Report**

This outline is part of the Safeguard Requirements 1. An environmental assessment report is required for all environment category A and B projects. Its level of detail and comprehensiveness is commensurate with the significance of potential environmental impacts and risks. A typical EIA report contains the following major elements, and an IEE may have a narrower scope depending on the nature of the project. The substantive aspects of this outline will guide the preparation of environmental impact assessment reports, although not necessarily in the order shown.

### A. Executive Summary

This section describes concisely the critical facts, significant findings, and recommended actions.

#### B. Policy, Legal, and Administrative Framework

This section discusses the national and local legal and institutional framework within which the environmental assessment is carried out. It also identifies project-relevant international environmental agreements to which the country is a party.

### C. Description of the Project

This section describes the proposed project; its major components; and its geographic, ecological, social, and temporal context, including any associated facility required by and for the project (for example, access roads, power plants, water supply, quarries and borrow pits, and spoil disposal). It normally includes drawings and maps showing the project's layout and components, the project site, and the project's area of influence.

#### D. Description of the Environment (Baseline Data)

This section describes relevant physical, biological, and socioeconomic conditions within the study area. It also looks at current and proposed development activities within the project's area of influence, including those not directly connected to the project. It indicates the accuracy, reliability, and sources of the data.

### E. Anticipated Environmental Impacts and Mitigation Measures

This section predicts and assesses the project's likely positive and negative direct and indirect impacts to physical, biological, socioeconomic (including occupational health and safety, community health and safety, vulnerable groups and gender issues, and impacts on livelihoods through environmental media), and physical cultural resources in the project's area of influence, in quantitative terms to the extent possible; identifies mitigation measures and any residual negative impacts that cannot be mitigated; explores opportunities for enhancement; identifies and estimates the extent and quality of available data, key data gaps, and uncertainties associated with predictions and specifies topics that do not require further attention; and examines global, trans boundary, and cumulative impacts as appropriate.

### F. Analysis of Alternatives

This section examines alternatives to the proposed project site, technology, design, and operation - including the no project alternative - in terms of their potential environmental impacts; the feasibility of mitigating these impacts; their capital and recurrent costs; their suitability under local conditions; and their institutional, training, and monitoring requirements. It also states the basis for selecting the particular project design proposed and, justifies recommended emission levels and approaches to pollution prevention and abatement.

### G. Information Disclosure, Consultation, and Participation

This section:

- describes the process undertaken during project design and preparation for engaging stakeholders, including information disclosure and consultation with affected people and other stakeholders;
- (ii) summarizes comments and concerns received from affected people and other stakeholders and how these comments have been addressed in project design and mitigation measures, with special attention paid to the needs and concerns of vulnerable groups, including women, the poor, and Indigenous Peoples; and (iii) describes the planned information disclosure measures (including the type of information to be disseminated and the method of dissemination) and the process for carrying out consultation with affected people and facilitating their participation during project implementation.

### H. Grievance Redress Mechanism

This section describes the grievance redress framework (both informal and formal channels), setting out the time frame and mechanisms for resolving complaints about environmental performance.

### I. Environmental Management Plan

This section deals with the set of mitigation and management measures to be taken during project implementation to avoid, reduce, mitigate, or compensate for adverse environmental impacts (in that order of priority). It may include multiple management plans and actions. It includes the following key components (with the level of detail commensurate with the project's impacts and risks):

(i) Mitigation:

- (a) identifies and summarizes anticipated significant adverse environmental impacts and risks;
- (b) describes each mitigation measure with technical details, including the type of impact to which it relates and the conditions under which it is required (for instance, continuously or in the event of contingencies), together with designs, equipment descriptions, and operating procedures, as appropriate; and,
- (c) provides links to any other mitigation plans (for example, for involuntary resettlement, Indigenous Peoples, or emergency response) required for the project.

- (ii) Monitoring:
  - (a) describes monitoring measures with technical details, including parameters to be measured, methods to be used, sampling locations, frequency of measurements, detection limits and definition of thresholds that will signal the need for corrective actions; and
  - (b) describes monitoring and reporting procedures to ensure early detection of conditions that necessitate particular mitigation measures and document the progress and results of mitigation.
- (iii) Implementation arrangements:
  - (a) specifies the implementation schedule showing phasing and coordination with overall project implementation;
  - (b) describes institutional or organizational arrangements, namely, who is responsible for carrying out the mitigation and monitoring measures, which may include one or more of the following additional topics to strengthen environmental management capability: technical assistance programs, training programs, procurement of equipment and supplies related to environmental management and monitoring, and organizational changes; and
  - (c) estimates capital and recurrent costs and describes sources of funds for implementing the environmental management plan.
- (iv) Performance indicators: describes the desired outcomes as measurable events to the extent possible, such as performance indicators, targets, or acceptance criteria that can be tracked over defined time periods.

#### J. Conclusion and Recommendation

This section provides the conclusions drawn from the assessment and provides recommendations.

### Appendix 3

#### Major Elements of an Environmental Audit Report

- i) Executive Summary;
- ii) Facilities description, including both past and current activities;
- iii) Summary of national, local, and any other applicable environmental laws, regulations, and standards;
- iv) Audit and site investigation procedure;
- v) Findings and areas of concern; and

Corrective action plan that provides the appropriate corrective actions for each area of concern, including costs and schedule.

#### **GENDER ACTION PLAN**

Activities	Indicators and Targets	Responsibility	Time Frame			
Output 1 Road Network system (including	bridges) repaired and rebabilitated		Tranic			
<ul> <li>Increase women's participation in community consultation/awareness raising activities</li> </ul>	At least 30% of participants of all community consultations and awareness raising activities are women	C&W Departments	1-3 Yr			
<ul> <li>Include safety measures and commuters/pedestrians' concerns in the design of roads and bridges (as part of "Build Back Better")</li> </ul>	<ul> <li>All project roads and bridges include gender-sensitive safety measures (including safe pathways, elevated side walkways, speed breakers etc.)</li> <li>All project roads and bridges include road and traffic signs(informatory, cautionary or mandatory signs)</li> </ul>	Social and Gender Specialist in the two PCUs				
<ul> <li>Encourage contractors to include women under cash-for-work schemes for the unskilled labor (where women are willing to work)</li> </ul>	<ul> <li>Contractors' contract include incentives for providing employment opportunities for women, as well as compliance with core labor standards (such as providing equal pay for work of equal value)</li> </ul>					
<ul> <li>Ensure women's grievances and concerns are addressed during reconstruction work</li> </ul>	<ul> <li>20% women representatives in grievance redress committees</li> <li>Reports on the results of grievance meetings identify issues raised by women and measures agreed to address these issues</li> </ul>					
Output 2: Irrigation and Flood management structures rehabilitated and upgraded to safer standards to protect against future flooding						
Employ women in planting and maintaining the plants along irrigation channels and protection bunds	<ul> <li>At least 30% of workers engaged for planting and maintenance work along irrigation channels and protection bunds are 30% women</li> </ul>	Irrigation Department, Punjab Social and Gender Specialist in PCU, Planning and Development Department, Punjab	1-3 Yr			

	Activities		Indicators and Targets	Responsibility	Time Frame			
Output 3: Disaster vulnerability reduced and DRM capacity increased								
Imp part mitig     Coll the	rove women's income through icipation in Land sliding risk gation measures lect gender disaggregated data under multi-hazard risk assessment	-	Land-sliding risk mitigation measures include procurement of 30% of the forest nurseriesowned by women Women suppliers of forest nurseries receive free inputs like plants, polythene bags and seeds Multi-hazard risk assessment tools and surveys include gender-	Forest Department Social and Gender Specialist in PCU	1 –Yr			
		-	disaggregated indicators/ parameters Gender disaggregated data and analysis of multi-hazard risk assessment for 16 Districts in Punjab inform the development of gender-inclusive/responsive social protection, disaster risk reduction, preparedness and response plans	P&D Department Government of Punjab Social and Gender Specialist at PCU Punjab	2-3 Yr			
• Ens carr prep	ure gender-inclusive awareness paign in disaster risk reduction, paredness and response	-	At least 30% women participation in disaster risk reduction and emergency preparedness and response campaigns	Planning & Development Departments				
Projec	t Management and Monitoring							
Re     spe	cruit social development and gender ecialist at Project Coordination Units	-	2 social development and gender specialist placed in each of the two PCUs	PIUs &PCUs	1Yr			
<ul> <li>Ca inc imp</li> </ul>	pacity building of the IAs in gender lusive project design and plementation	-	Training in gender-responsive/ inclusive measures for developing disaster risk reduction, preparedness and response systems conducted for all IAs (1 each for the two project areas)					
• En in f	courage recruitment of women staff PIUs	-	20% of the PIUs staff are women					
• Inc rep	lude indicators of GAP in the periodic ports and project monitoring system	-	Project bi-annual, mid-term and completion reports include progress against GAP indicators and results (good practices, lessons learnt etc.)		1-3 Yr			